

=> d his

(FILE 'HOME' ENTERED AT 06:14:51 ON 04 NOV 1999) ✓

FILE 'REGISTRY' ENTERED AT 06:15:15 ON 04 NOV 1999 ✓

FILE 'HCAPLUS' ENTERED AT 06:15:19 ON 04 NOV 1999

L1 439214 S RESIN  
L2 5367 S SOLID SUPPORT  
L3 9087 S SOLID(2A)PHASE(2A)SYNTHES?  
L4 3826 S L1 AND (L2 OR L3)

FILE 'REGISTRY' ENTERED AT 06:17:51 ON 04 NOV 1999

FILE 'HCAPLUS' ENTERED AT 06:17:59 ON 04 NOV 1999

SET SMARTSELECT ON  
L5 SEL L4 1- RN : 50255 TERMS  
SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 06:22:47 ON 04 NOV 1999

L6 50216 S L5

FILE 'HCAPLUS' ENTERED AT 06:31:09 ON 04 NOV 1999

SET SMARTSELECT ON  
L7 SEL L4 3479- RN : 1830 TERMS  
SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 06:31:40 ON 04 NOV 1999

L8 1827 S L7  
L9 51442 S L6 OR L8  
L10 45025 S L9 AND N/ELS  
L11 44448 S L10 AND (O/ELS OR N>1)  
ACT MCCAR122/A

L12 STR

L13 STR L12

L14 47 S L13 SSS SAM SUB=L11

L15 909 S L13 SSS FUL SUB=L11

FILE 'HCAPLUS' ENTERED AT 06:36:13 ON 04 NOV 1999

L16 16904 S L15  
L17 293 S L16 AND L4  
L18 6 S L16(L)L2  
L19 55 S L16(L)L3  
L20 61 S L18 OR L19  
L21 56 S L20 AND L1  
L22 1141 S L15/P  
L23 52 S L21 AND L22

FILE 'CAOLD' ENTERED AT 06:47:20 ON 04 NOV 1999

L24 0 S L21

=> d que l15

L1 439214 SEA FILE=HCAPLUS ABB=ON PLU=ON RESIN  
L2 5367 SEA FILE=HCAPLUS ABB=ON PLU=ON SOLID SUPPORT  
L3 9087 SEA FILE=HCAPLUS ABB=ON PLU=ON SOLID(2A)PHASE(2A)SYNTHES?  
L4 3826 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND (L2 OR L3)  
L5 SEL PLU=ON L4 1- RN : 50255 TERMS (TERM LIMIT EXCEED  
ED)  
L6 50216 SEA FILE=REGISTRY ABB=ON PLU=ON L5  
L7 SEL PLU=ON L4 3479- RN : 1830 TERMS  
L8 1827 SEA FILE=REGISTRY ABB=ON PLU=ON L7  
L9 51442 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L8  
L10 45025 SEA FILE=REGISTRY ABB=ON PLU=ON L9 AND N/ELS  
L11 44448 SEA FILE=REGISTRY ABB=ON PLU=ON L10 AND (O/ELS OR N>1)  
L13 STR

PRO

5  
G2  
:  
:  
:  
G1-NH-C  
1 2 3

VAR G1=NH/O

VAR G2=O/S/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

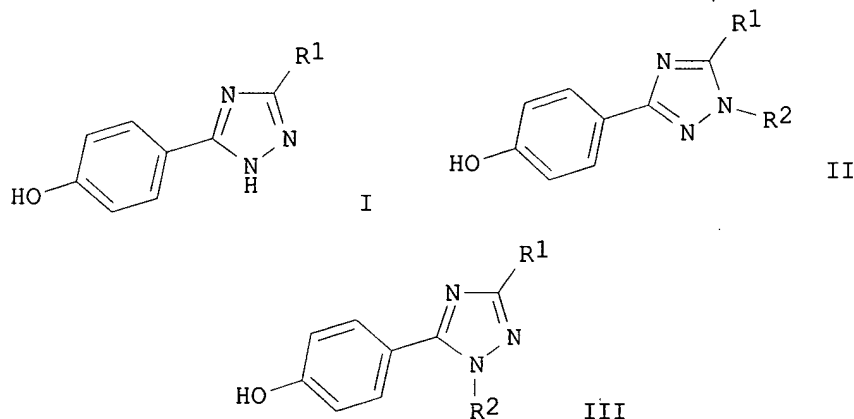
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L15 909 SEA FILE=REGISTRY SUB=L11 SSS FUL L13

=> d bib abs hitstr

L23 ANSWER 1 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1999:596207 HCAPLUS  
TI Synthesis of 1,2,4-Triazole-Functionalized Solid Support and Its Use in  
the Solid-Phase Synthesis of Trisubstituted 1,2,4-Triazoles  
AU Katritzky, Alan R.; Qi, Ming; Feng, Daming; Zhang, Guifeng; Griffith,  
Michael C.; Watson, Karen  
CS Center for Heterocyclic Compounds Department of Chemistry, University of  
Florida, Gainesville, FL, 32611-7200, USA  
SO Org. Lett. (1999), 1(8), 1189-1191  
CODEN: ORLEF7; ISSN: 1523-7060  
PB American Chemical Society  
DT Journal  
LA English  
GI



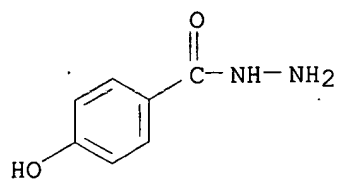
AB 1,2,4-Triazoles I-III (R1 = Ph, 3-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, Me; R2 = Bu, i-Pr, cyclopentyl, allyl, PhCH<sub>2</sub>, 2-octyl, 1-phenylethyl, cyclopropylmethyl) were synthesized on Wang **resin** solid support in three steps with excellent yields and purities. The utility of this triazole-functionalized solid support was demonstrated by the solid-phase synthesis of various trisubstituted 1,2,4-triazoles.

IT INDEXING IN PROGRESS

IT **5351-23-5DP**, 4-Hydroxybenzoic acid hydrazide, polymer bound  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of a triazole-functionalized Wang **resin solid support** from Me hydroxybenzoate and amidines and its use in prepg. trisubstituted triazoles)

RN 5351-23-5 HCAPLUS

CN Benzoic acid, 4-hydroxy-, hydrazide (9CI) (CA INDEX NAME)



=> d bib abs hitstr 2

L23 ANSWER 2 OF 52 HCAPLUS COPYRIGHT 1999 ACS

AN 1999:451277 HCAPLUS

DN 131:87512

TI Solid-support synthesis of hydroxamic acids using **resins** with oxime moieties

IN Golebiowski, Adam; Klopfenstein, Sean Rees

PA The Procter & Gamble Company, USA

SO PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9935126	A1	19990715	WO 1998-IB2117	19981228
	W: AU, CA, IL, JP, NO, NZ, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRAI US 1998-70980 19980109

OS CASREACT 131:87512

AB Hydroxamic acids are prepd. in high yield and selectivity using a solid-support **resin** having an oxime moiety as the linking moiety [where the functional moiety attached to the polymer backbone is 4-C6H4C(:NOH)C6H4NO2-4'] by: (A) condensing the **resin** with a carboxylic acid (e.g., 2-furoic acid) to form a bound oxime ester; (B) optionally modifying the side chain; (C) cleaving a product from the **resin** by reaction with Me3CSi(Me)2ONH2; (D) optionally modifying the side chain; and (E) optionally treating the resulting O-TBS-protected material RCONHOSi(Me)2CMe3 (R = 2-furyl) with acid (e.g., trifluoroacetic acid) to produce an unprotected hydroxamic acid RCONHOH.

IT 4312-93-0P 6953-61-3P 10335-80-5P

10507-69-4P 17698-14-5P 31982-81-7P

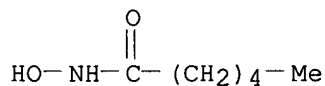
208924-63-4P 208924-64-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(**solid-support** synthesis of hydroxamic acids using **resins** with oxime moieties)

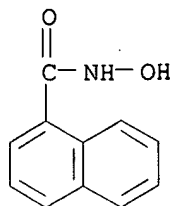
RN 4312-93-0 HCAPLUS

CN Hexanamide, N-hydroxy- (9CI) (CA INDEX NAME)



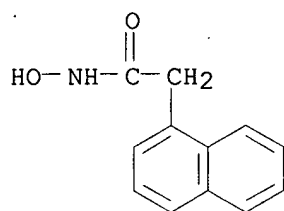
RN 6953-61-3 HCAPLUS

CN 1-Naphthalenecarboxamide, N-hydroxy- (9CI) (CA INDEX NAME)



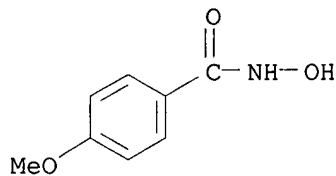
RN 10335-80-5 HCAPLUS

CN 1-Naphthaleneacetamide, N-hydroxy- (9CI) (CA INDEX NAME)



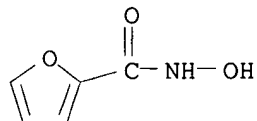
RN 10507-69-4 HCAPLUS

CN Benzamide, N-hydroxy-4-methoxy- (9CI) (CA INDEX NAME)



RN 17698-14-5 HCAPLUS

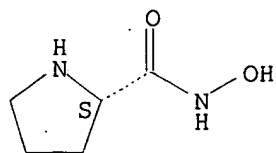
CN 2-Furancarboxamide, N-hydroxy- (9CI) (CA INDEX NAME)



RN 31982-81-7 HCAPLUS

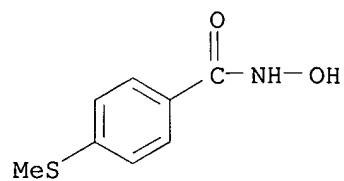
CN 2-Pyrrolidinecarboxamide, N-hydroxy-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



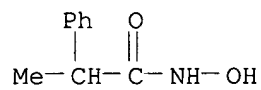
RN 208924-63-4 HCAPLUS

CN Benzamide, N-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



RN 208924-64-5 HCAPLUS

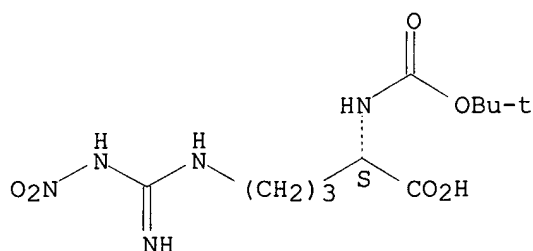
CN Benzeneacetamide, N-hydroxy-.alpha.-methyl- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 3

L23 ANSWER 3 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1999:440760 HCAPLUS  
DN 131:199967  
TI Novel protocol for the solid-phase synthesis of peptidyl and  
peptidomimetic P1-argininal derivatives  
AU Siev, Daniel V.; Gaudette, John A.; Semple, J. Edward  
CS Department of Medicinal Chemistry, Corvas International, Inc., San Diego,  
CA, 92121, USA  
SO Tetrahedron Lett. (1999), 40(28), 5123-5127  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
OS CASREACT 131:199967  
AB The design, synthesis and application of novel argininal amins tethered  
onto AM resin is described. Efficient solid-phase synthesis  
routes to a wide array of the title derivs. have been implemented using  
this convenient technol. The resulting P1-argininal targets serve as  
useful exploratory scaffolds for serine and cysteine protease inhibitor  
discovery.  
IT 2188-18-3  
RL: RCT (Reactant)  
(solid-phase synthesis of peptidyl and  
peptidomimetic P1-argininal derivs.)  
RN 2188-18-3 HCAPLUS  
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-  
[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

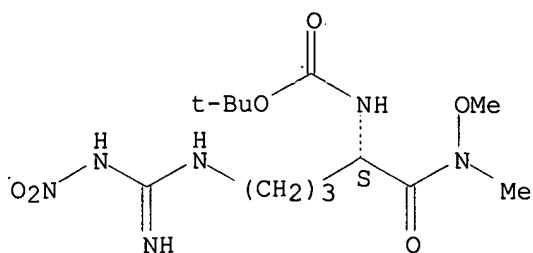
Absolute stereochemistry.



IT 139976-34-4P 186261-75-6P 241146-46-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis of peptidyl and  
peptidomimetic P1-argininal derivs.)  
RN 139976-34-4 HCAPLUS  
CN Carbamic acid, [(1S)-4-[[imino(nitroamino)methyl]amino]-1-  
[(methoxymethylamino)carbonyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



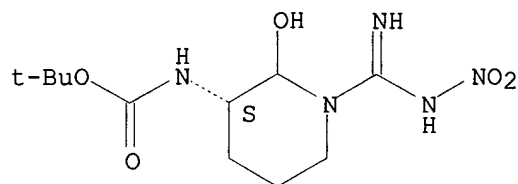


RN 186261-75-6 HCAPLUS

CN Carbamic acid,

[(3S)-2-hydroxy-1-[imino(nitroamino)methyl]-3-piperidinyl]-  
, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 241146-46-3 HCAPLUS

CN Hexanoic acid, 6-[[[(3S)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-  
[imino(nitroamino)methyl]-2-piperidinyl]oxy]-, ethyl ester (9CI) (CA  
INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

=> d bib abs hitstr 4

L23 ANSWER 4 OF 52 HCAPLUS COPYRIGHT 1999 ACS

AN 1999:421636 HCAPLUS

DN 131:73978

TI Solid phase synthesis of amino acid and peptide substituted diamines

IN Pongor, Sandor; Zahariev, Sotir; Guarnaccia, Corrado

PA International Centre for Genetic Engineering and Biotechnology, Italy

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9932428	A2	19990701	WO 1998-EP8415	19981222
	WO 9932428	A3	19990910		

W: CA, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI GB 1997-27123 19971222

OS CASREACT 131:73978; MARPAT 131:73978

AB Diamines of formula R5R2NCHR1-R3-CH2NHR4 [R1 = H, alkyl, (un)substituted amino acid side chain; R2 = H, alkyl; or R1 and R2 together with the atoms

to which they are bonded form a heterocyclic ring; R3 = C1-10 alkylene group, bond; R4 and R5 independently = H, a nitrogen protecting group, an amino acid, an amino acid deriv., a peptide chain, or a detectable label] were prepd. using a solid phase method which comprises: (i) reacting an N-protected amino aldehyde with an amino group attached to a solid **resin** to produce a **resin**-bound enamine product and (ii) reducing the enamine product to produce a **resin**-bound N-protected diamine. The **resin** bound diamine may be further modified, e.g., by further protection, reaction with an amino acid or by carrying out solid phase peptide synthesis to provide a peptide bonded at its C-terminus to a diamine moiety. The method was applied to the synthesis of C-terminal modified analogs of human calcitonin (28-32) and Leu-enkephalin, e.g. H-Tyr-Gly-Gly-Phe-Leu.psi.[CH2NH(Dns-Ahx)] (Dns = dansyl, Ahx = aminohexanoic acid).

IT **228715-25-1P**

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

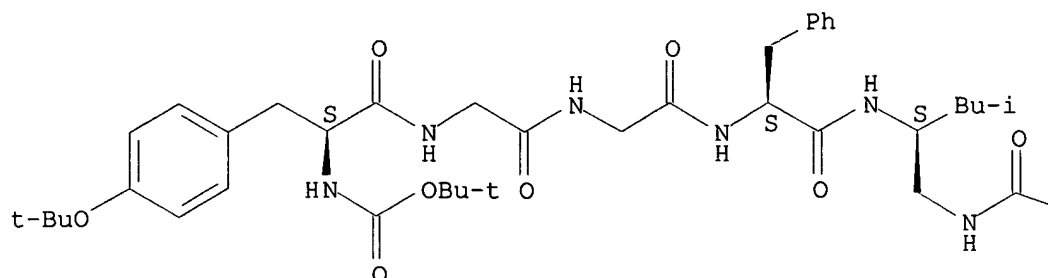
(**solid phase synthesis** of amino acid and peptide substituted diamines)

RN 228715-25-1 HCAPLUS

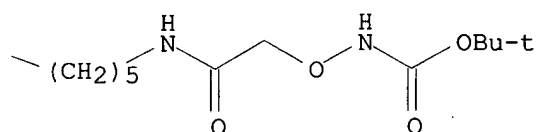
CN L-Phenylalaninamide, N-[(1,1-dimethylethoxy)carbonyl]-O-(1,1-dimethylethyl)-L-tyrosylglycylglycyl-N-[(1S)-17,17-dimethyl-1-(2-methylpropyl)-4,11,15-trioxo-13,16-dioxo-3,10,14-triazaoctadec-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



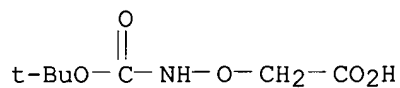
IT 42989-85-5

RL: RCT (Reactant)

(solid phase synthesis of amino acid and peptide substituted diamines)

RN 42989-85-5 HCAPLUS

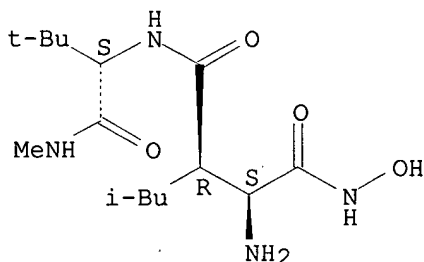
CN Acetic acid, [[[(1,1-dimethylethoxy)carbonyl]amino]oxy]- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 5

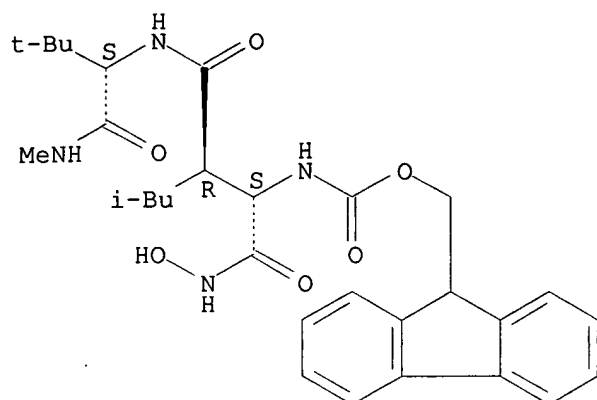
L23 ANSWER 5 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1999:368457 HCAPLUS  
DN 131:130276  
TI Solid-phase synthesis of hydroxamic acid based TNF-.alpha. convertase inhibitors  
AU Barlaam, Bernard; Koza, Patrice; Berriot, Julien  
CS Zeneca Pharma, Centre de Recherches, Z.I. La Pompelle, Reims, 51689, Fr.  
SO Tetrahedron (1999), 55(23), 7221-7232  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB An acid-sensitive linker for the solid phase synthesis of hydroxamic acids is described. Hydroxamic acid-based TNF.alpha. inhibitors have been prepd. by solid phase synthesis. Derivatization of N2-[4-(N-oxyamino)-2R-isobutyl-3S-aminosuccinyl]-L-tert-leucine-N1-methylamide grafted on Sasrin resin and subsequent acidic cleavage afforded hydroxamic acids in good yields and with good purity.  
IT 204126-51-2DP, resin-bound 233749-18-3DP, resin-bound 233749-19-4P 233749-49-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (solid-phase synthesis of hydroxamic acid based TNF-.alpha. convertase inhibitors)  
RN 204126-51-2 HCAPLUS  
CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233749-18-3 HCAPLUS  
CN L-Valinamide, (3R)-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

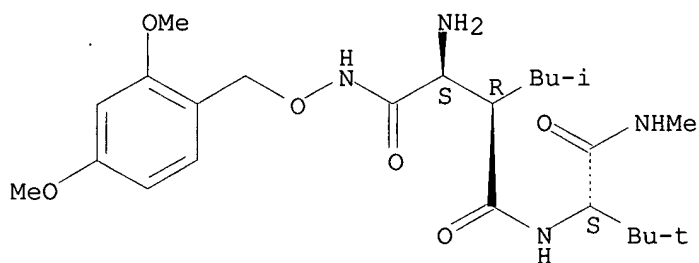
Absolute stereochemistry.



RN 233749-19-4 HCAPLUS

CN L-Valinamide, (3R)-N-[(2,4-dimethoxyphenyl)methoxy]-3-(2-methylpropyl)-L-.alpha.-asparaginyln-N,3-dimethyl- (9CI) (CA INDEX NAME)

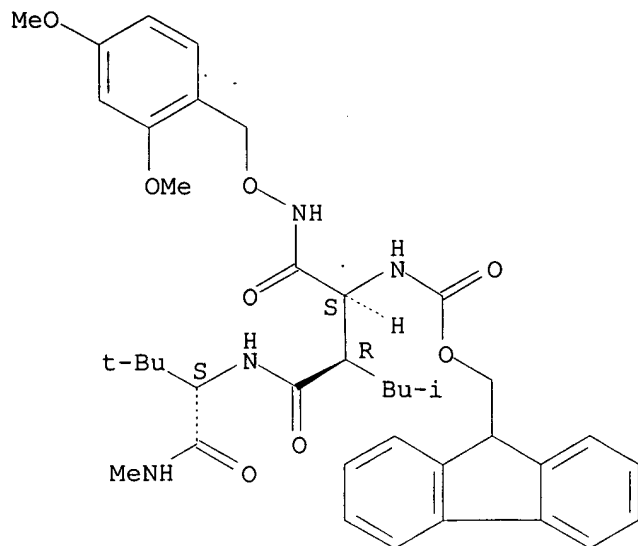
Absolute stereochemistry.



RN 233749-49-0 HCAPLUS

CN L-Valinamide, (3R)-N-[(2,4-dimethoxyphenyl)methoxy]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-3-(2-methylpropyl)-L-.alpha.-asparaginyln-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



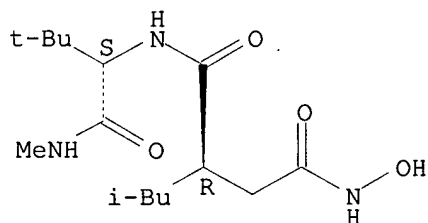
IT 145337-55-9P 204126-51-2P 233749-18-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis of hydroxamic acid  
based TNF- $\alpha$  convertase inhibitors)

RN 145337-55-9 HCAPLUS

CN Butanediamide, N1-[(1S)-2,2-dimethyl-1-[(methylamino)carbonyl]propyl]-N4-hydroxy-2-(2-methylpropyl)-, (2R)- (9CI) (CA INDEX NAME)

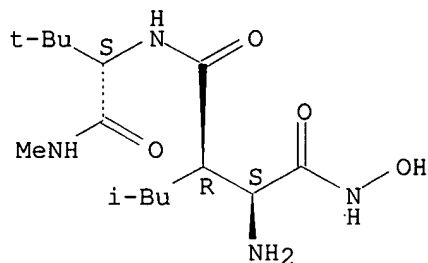
Absolute stereochemistry.



RN 204126-51-2 HCAPLUS

CN L-Valinamide,  
(3R)-N-hydroxy-3-(2-methylpropyl)-L- $\alpha$ -asparaginyln-N,3-dimethyl- (9CI) (CA INDEX NAME)

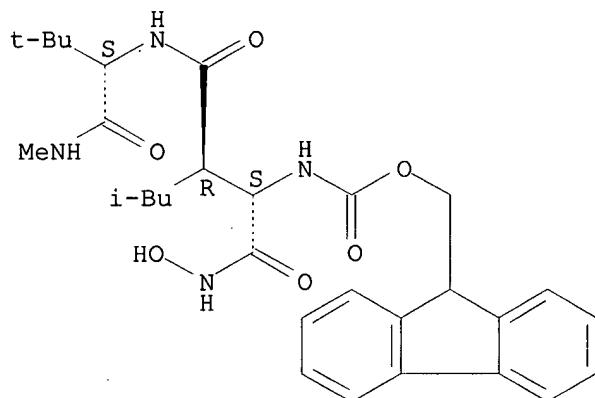
Absolute stereochemistry.



RN 233749-18-3 HCAPLUS

CN L-Valinamide, (3R)-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 204125-69-9P 233749-20-7P 233749-21-8P  
 233749-22-9P 233749-23-0P 233749-24-1P  
 233749-25-2P 233749-26-3P 233749-27-4P  
 233749-28-5P 233749-29-6P 233749-30-9P  
 233749-31-0P 233749-32-1P 233749-33-2P  
 233749-34-3P 233749-35-4P 233749-36-5P  
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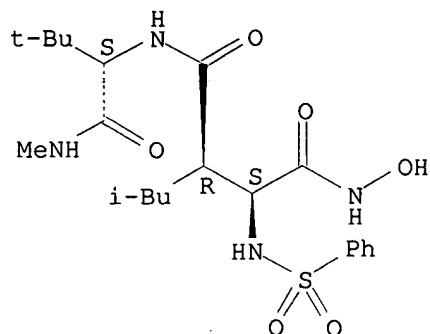
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(solid-phase synthesis of hydroxamic acid based TNF-.alpha. convertase inhibitors)

RN 204125-69-9 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-(phenylsulfonyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

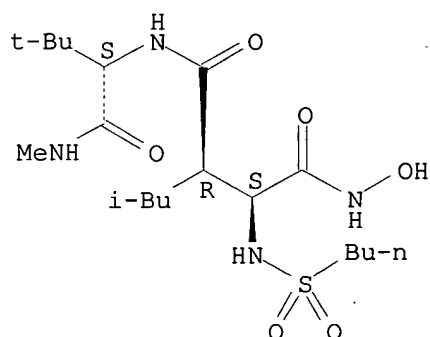
Absolute stereochemistry.



RN 233749-20-7 HCAPLUS

CN L-Valinamide, (3R)-N2-(butylsulfonyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

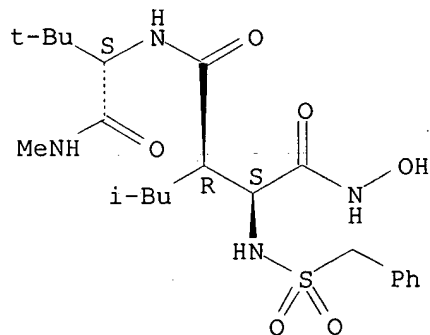
Absolute stereochemistry.



RN 233749-21-8 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(phenylmethyl)sulfonyl]-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233749-22-9 HCAPLUS

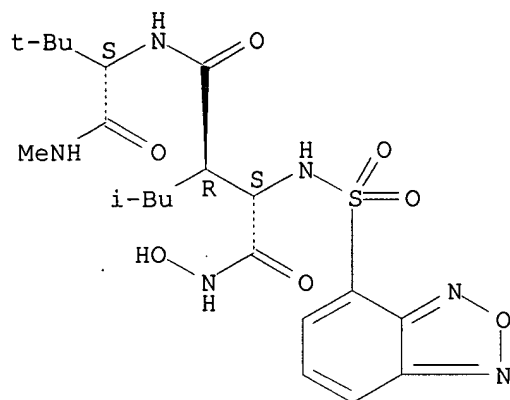
Searched by John Dantzman

308-4488



CN L-Valinamide, (3R)-N2-(2,1,3-benzoxadiazol-4-ylsulfonyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

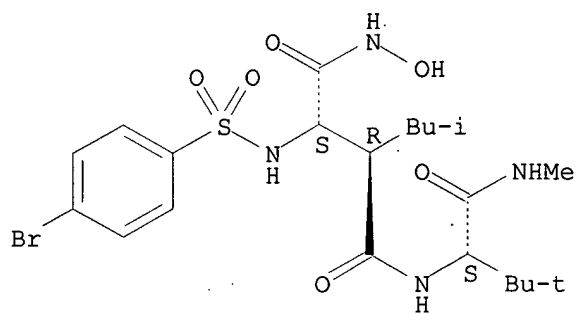
Absolute stereochemistry.



RN 233749-23-0 HCAPLUS

CN L-Valinamide, (3R)-N2-[(4-bromophenyl)sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

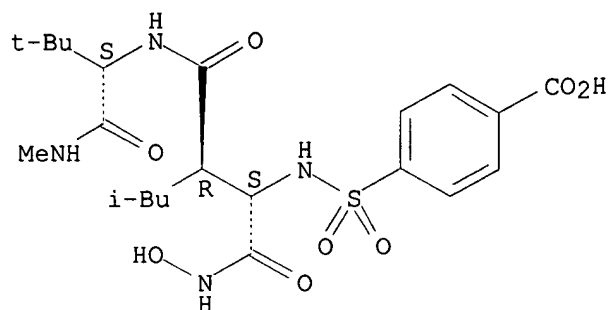
Absolute stereochemistry.



RN 233749-24-1 HCAPLUS

CN L-Valinamide, (3R)-N2-[(4-carboxyphenyl)sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

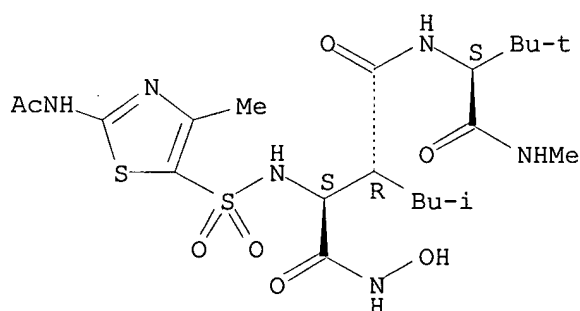
Absolute stereochemistry.



RN 233749-25-2 HCAPLUS

CN L-Valinamide, (3R)-N2-[[2-(acetylamino)-4-methyl-5-thiazolyl]sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

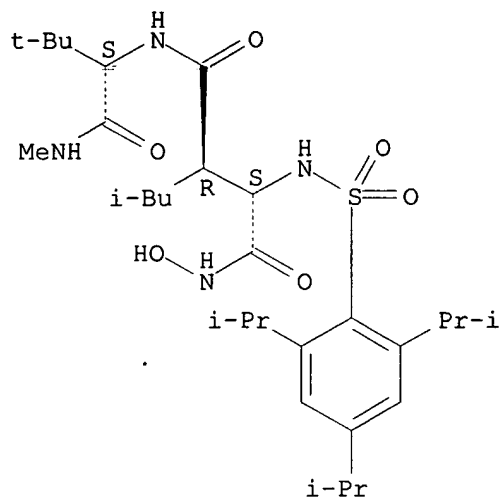
Absolute stereochemistry.



RN 233749-26-3 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

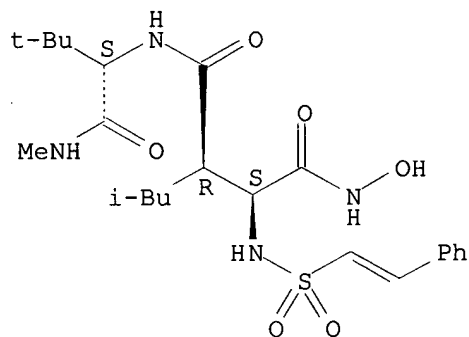
Absolute stereochemistry.



RN 233749-27-4 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(2-phenylethenyl)sulfonyl]-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

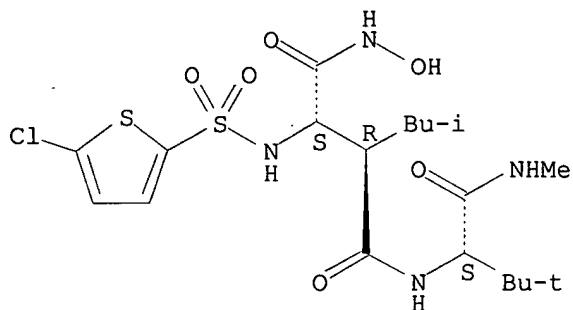
Absolute stereochemistry.  
Double bond geometry unknown.



RN 233749-28-5 HCAPLUS

CN L-Valinamide, (3R)-N2-[(5-chloro-2-thienyl)sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

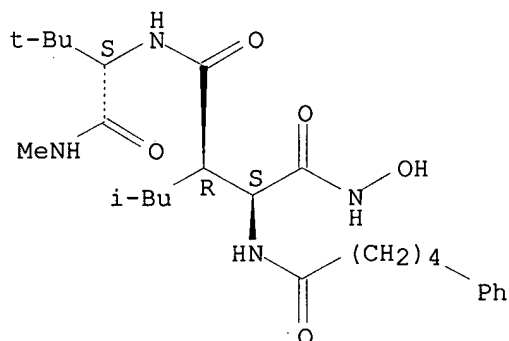


RN 233749-29-6 HCAPLUS

CN L-Valinamide,

(3R)-N-hydroxy-3-(2-methylpropyl)-N2-(1-oxo-5-phenylpentyl)-  
L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

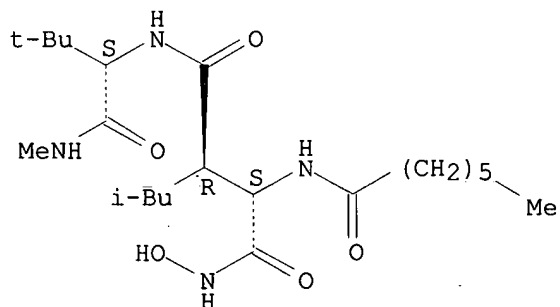
Absolute stereochemistry.



RN 233749-30-9 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-N-(1-oxoheptyl)-L-.alpha.-asparaginyl-N,3-  
dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233749-31-0 HCAPLUS

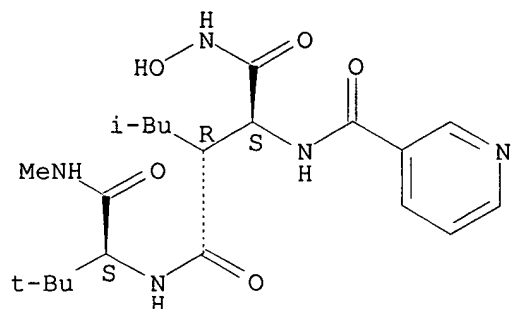
CN L-Valinamide,

(3R)-N-hydroxy-3-(2-methylpropyl)-N2-(3-pyridinylcarbonyl)-L-

Searched by John Dantzman 308-4488

.alpha.-asparaginyln-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



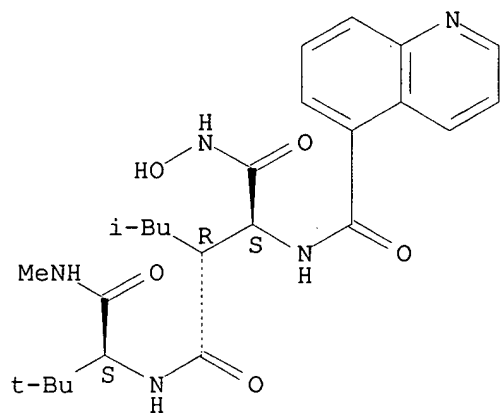
RN 233749-32-1 HCAPLUS

CN L-Valinamide,

(3R)-N-hydroxy-3-(2-methylpropyl)-N2-(5-quinolinylcarbonyl)-

L-.alpha.-asparaginyln-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233749-33-2 HCAPLUS

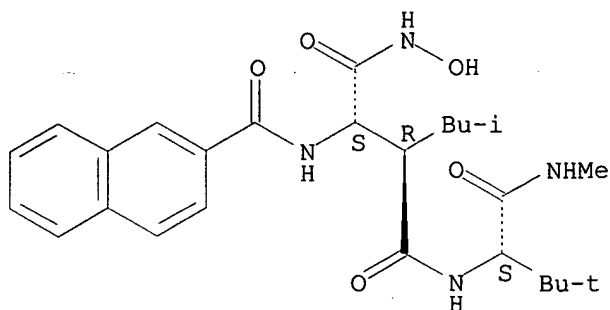
CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-(2-

naphthalenylcarbonyl)-L-.alpha.-asparaginyln-N,3-dimethyl- (9CI) (CA

INDEX

NAME)

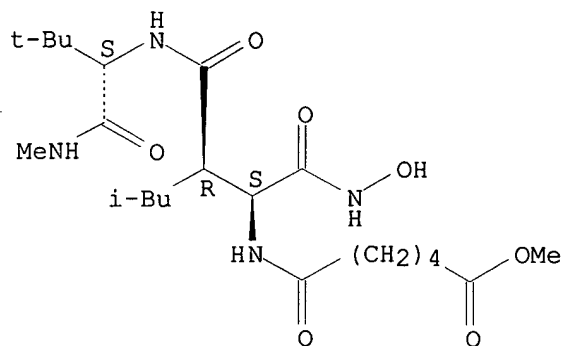
Absolute stereochemistry.



RN 233749-34-3 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-N2-(6-methoxy-1,6-dioxohexyl)-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

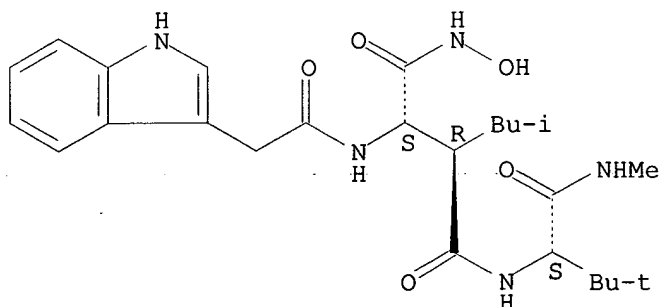
Absolute stereochemistry.



RN 233749-35-4 HCAPLUS

CN L-Valinamide,  
(3R)-N-hydroxy-N2-(1H-indol-3-ylacetyl)-3-(2-methylpropyl)-L-  
.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

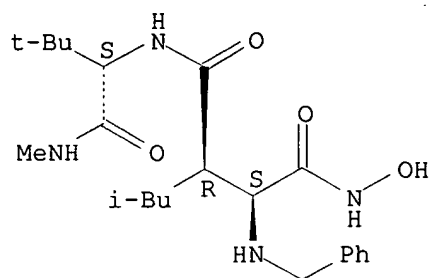


RN 233749-36-5 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-(phenylmethyl)-L-  
.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Searched by John Dantzman . 308-4488

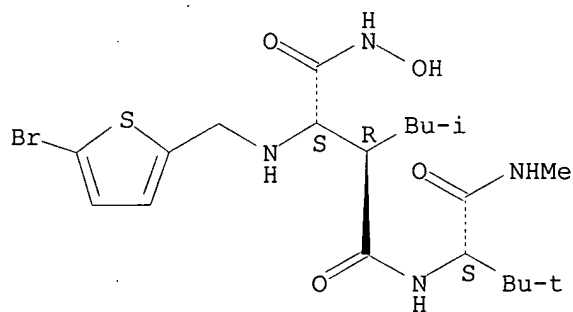
Absolute stereochemistry.



RN 233749-37-6 HCAPLUS

CN L-Valinamide, (3R)-N2-[(5-bromo-2-thienyl)methyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

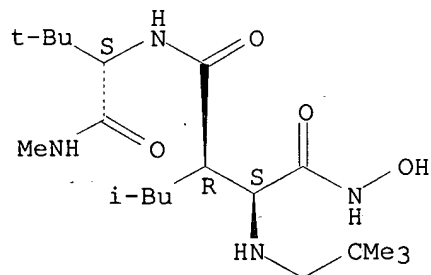
Absolute stereochemistry.



RN 233749-38-7 HCAPLUS

CN L-Valinamide, (3R)-N2-(2,2-dimethylpropyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

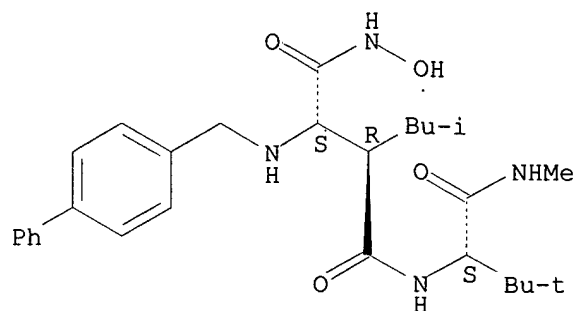
Absolute stereochemistry.



RN 233749-39-8 HCAPLUS

CN L-Valinamide, (3R)-N2-([1,1'-biphenyl]-4-ylmethyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginy-N,3-dimethyl- (9CI) (CA INDEX NAME)

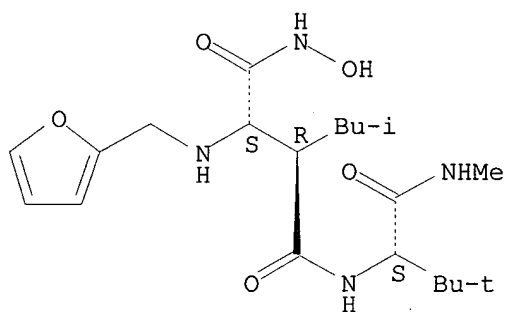
Absolute stereochemistry.



RN 233749-40-1 HCAPLUS

CN L-Valinamide, (3R)-N2-(2-furanylmethyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

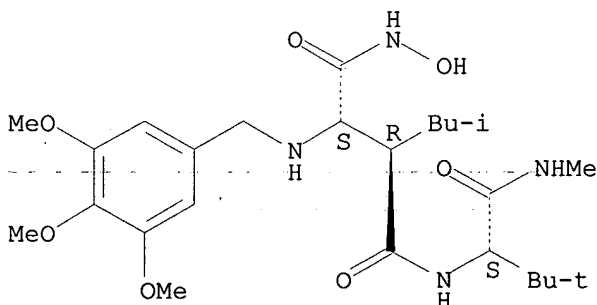
Absolute stereochemistry.



RN 233749-41-2 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(3,4,5-trimethoxyphenyl)methyl]-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233749-42-3 HCAPLUS

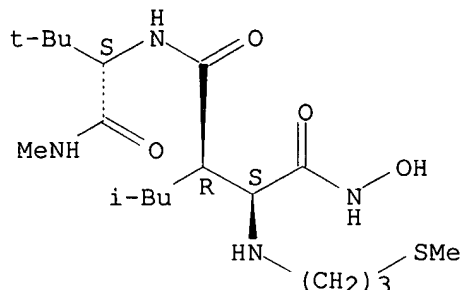
CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[3-(methylthio)propyl]-

Searched by John Dantzman 308-4488



L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

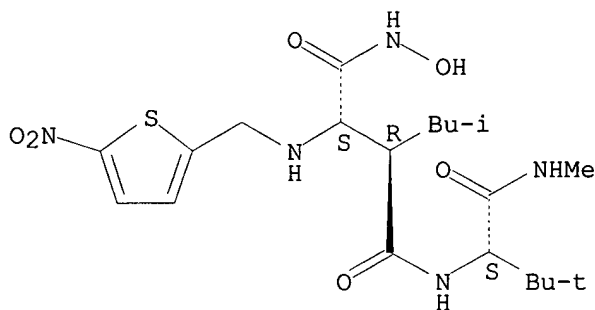
Absolute stereochemistry.



RN 233749-43-4 HCAPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(5-nitro-2-thienyl)methyl]-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

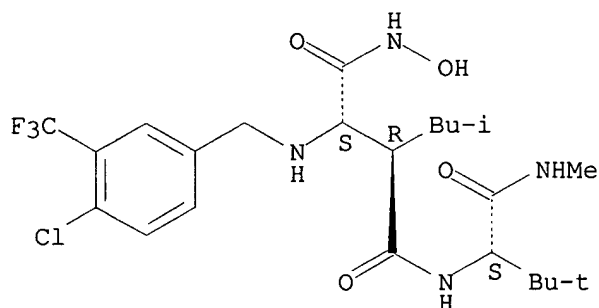
Absolute stereochemistry.



RN 233749-44-5 HCAPLUS

CN L-Valinamide, (3R)-N2-[[4-chloro-3-(trifluoromethyl)phenyl]methyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

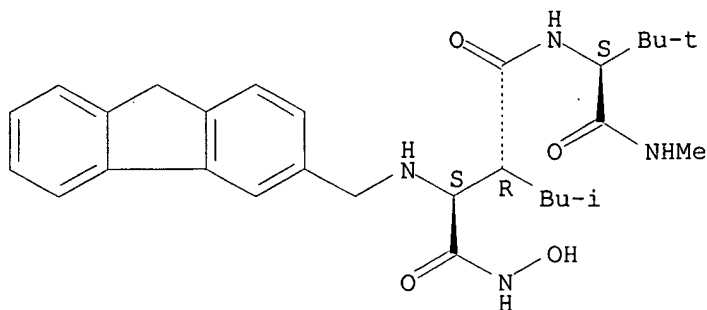
Absolute stereochemistry.



RN 233749-45-6 HCAPLUS

CN L-Valinamide, (3R)-N2-(9H-fluoren-3-ylmethyl)-N-hydroxy-3-(2-methylpropyl)-  
L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

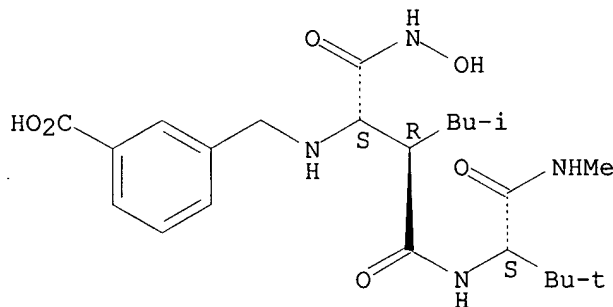
Absolute stereochemistry.



RN 233749-46-7 HCAPLUS

CN L-Valinamide, (3R)-N2-[(3-carboxyphenyl)methyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

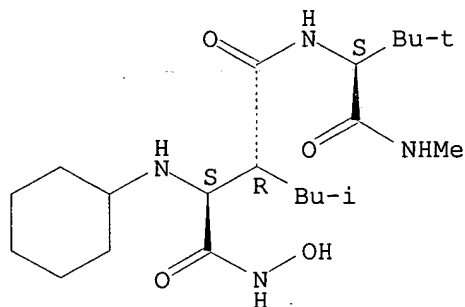
Absolute stereochemistry.



RN 233749-47-8 HCAPLUS

CN L-Valinamide, (3R)-N2-cyclohexyl-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

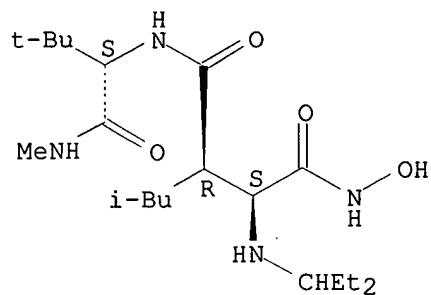
Absolute stereochemistry.



RN 233749-48-9 HCAPLUS

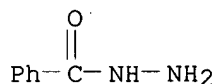
CN L-Valinamide, (3R)-N2-(1-ethylpropyl)-N-hydroxy-3-(2-methylpropyl)-L-  
.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



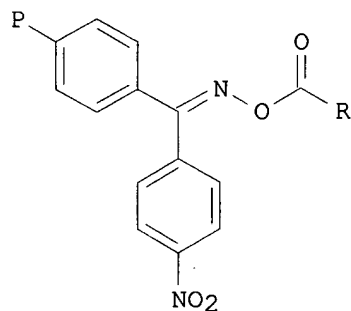
=> d bib abs hitstr 6

L23 ANSWER 6 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1999:118572 HCAPLUS  
DN 130:237513  
TI Polymer-supported acylhydrazones. Use in Sc(OTf)<sub>3</sub>-catalyzed Mannich-type reactions providing an efficient method for the preparation of diverse pyrazolone derivatives  
AU Kobayashi, Shu; Furuta, Takayuki; Sugita, Kasumi; Okitsu, Osamu; Oyamada, Hidekazu  
CS Graduate School of Pharmaceutical Sciences, CREST, Japan Science and Technology Corporation (JST), The University of Tokyo, Tokyo, 113-0033, Japan  
SO Tetrahedron Lett. (1999), 40(7), 1341-1344  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB Polymer-supported acylhydrazones, prepd. from polystyrene **resin** (1%-divinylbenzene), reacted with ketene silyl acetals in the presence of a catalytic amt. of scandium triflate to afford the corresponding .beta.-hydrazino esters, which were cyclized and cleaved from the support simultaneously by treatment with a base to produce diverse pyrazolone derivs.  
IT **613-94-5DP**, Benzoylhydrazine, polymer-bound  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(**solid-phase synthesis** of pyrazolones via  
Sc(OTf)<sub>3</sub>-catalyzed Mannich-type reaction of polymer-supported benzoylhydrazones)  
RN 613-94-5 HCAPLUS  
CN Benzoic acid, hydrazide (6CI, 8CI, 9CI) (CA INDEX NAME)

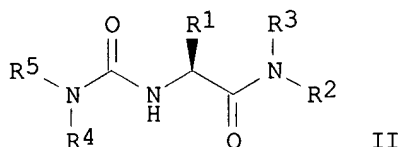


=> d bib abs hitstr 7

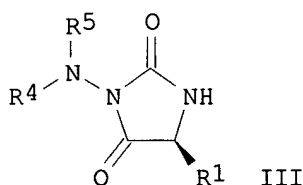
L23 ANSWER 7 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1999:112342 HCAPLUS  
DN 130:252642  
TI Solid-Phase Synthesis of Acyclic and Cyclic Amino Acid Derived Urea  
Peptidomimetics Using Phoxime **Resin**  
AU Hamuro, Yoshitomo; Marshall, William J.; Scialdone, Mark A.  
CS DuPont Life Sciences Enterprise Biochemical Science and Engineering,  
Wilmington, DE, 19880-0328, USA  
SO J. Comb. Chem. (1999), 1(2), 163-172  
CODEN: JCCHFF; ISSN: 1520-4766  
PB American Chemical Society  
DT Journal  
LA English  
GI



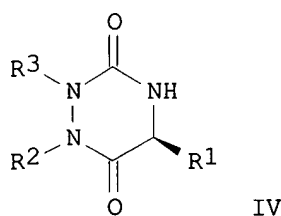
I



II



III



IV

AB The use of phosgenated p-nitrophenyl(polystyrene)ketoxime (Phoxime) **resin I** (R = Cl; P = polystyrene support) in the synthesis of acyclic and heterocyclic amino acid derived ureas is described. **Resin I** (R = Cl) was previously shown to be a useful precursor in the solid-phase prepn. of nonsym. ureas from thermolysis of corresponding primary amine oxime carbamates and subsequent trapping with an amine in soln. Generation of functionalized polymer-supported primary amine oxime carbamates I [R = Ala-OH, Val-OH, Phe-OH, Asp(OtBu), Lys(Boc), NHNHCH2Ph, NHNHCH2CO2Et, NHNHPh, NMeNHMe, NHNMe2, etc.] for further diversification was accomplished by addn. of amino acids or substituted hydrazines. The

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use of these functionalized oxime carbamate **resins** for the generation of acyclic .alpha.-ureidoacetamides II [R1 = Me, CH2Ph, CHMe2, CH2CO2CMe3, (CH2)4NHBoc; R2 = R3 = Et; R2 = H, R3 = CH2Ph, 2-pyridyl; NR2R3 = Phe-OCMe3; R4 = R5 = Et; R4 = H, R5 = PhCH2; R4R5N = morpholino], 3-aminohydantoin III (R1 = Me, CH2Ph; R3 = H, R4 = CH2Ph, 2-pyridyl, 4-MeOC6H4, Ph, 4-O2NC6H4, tosyl, EtO2CCH2; R3 = R4 = Me), and 1,2,4-triazine-3,6-diones IV (R2 = Me, R3 = H, Me; R2 = H, R3 = Me) is suitable for combinatorial library generation.

IT 221635-23-0DP, polystyrene-bound 221635-24-1DP, polystyrene-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (solid-phase synthesis of acyclic and cyclic amino acid derived urea peptidomimetics using phosgenated nitrophenyl(polystyrene)ketoxime **resin**)

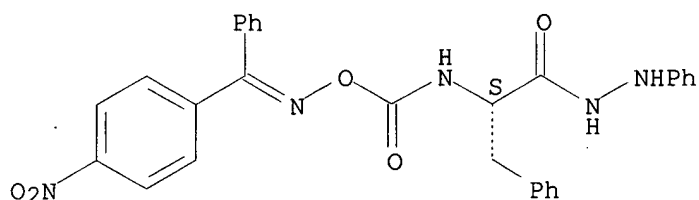
RN 221635-23-0 HCAPLUS

CN L-Phenylalanine,

N-[[[(4-nitrophenyl)phenylmethylene]amino]oxy]carbonyl]-, 2-phenylhydrazide (9CI) (CA INDEX NAME)

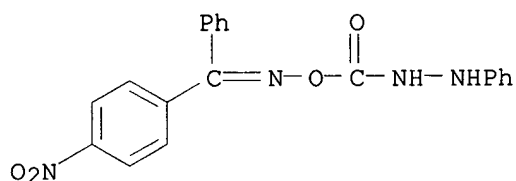
Absolute stereochemistry.

Double bond geometry unknown.



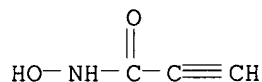
RN 221635-24-1 HCAPLUS

CN Methanone, (4-nitrophenyl)phenyl-, O-[(2-phenylhydrazino)carbonyl]oxime (9CI) (CA INDEX NAME)



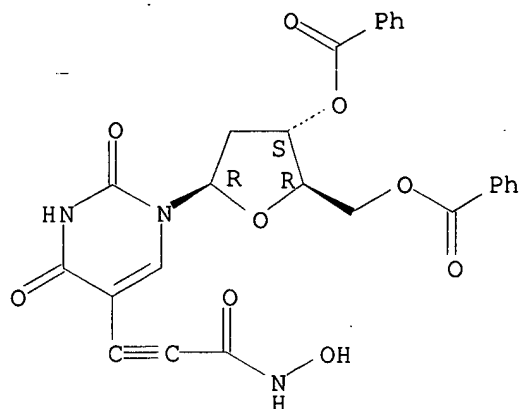
=> d bib abs hitstr 8

L23 ANSWER 8 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1998:700116 HCAPLUS  
DN 130:38625  
TI A facile and convenient solid-phase procedure for synthesizing nucleoside hydroxamic acids  
AU Khan, Shoeb I.; Grinstaff, Mark W.  
CS Department of Chemistry, P.M. Gross Chemical Laboratory, Duke University, Durham, NC, 27708, USA  
SO Tetrahedron Lett. (1998), 39(44), 8031-8034  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB The solid-phase synthesis of a nucleoside hydroxamic acid is accomplished by the Pd(0) cross-coupling of 5-iodouridine and an O-linked hydroxylamine alkyne bound to 2-chlorotrityl chloride polystyrene **resin**.  
IT **216970-08-0DP**, 2-chlorotrityl chloride polystyrene **resin** bound **216970-11-5DP**, 2-chlorotrityl chloride polystyrene **resin** bound **216970-12-6DP**, 2-chlorotrityl chloride polystyrene **resin** bound  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (facile and convenient **solid-phase** procedure for **synthesizing** nucleoside hydroxamic acids)  
RN 216970-08-0 HCAPLUS  
CN 2-Propynamide, N-hydroxy- (9CI) (CA INDEX NAME)



RN 216970-11-5 HCAPLUS  
CN Uridine, 2'-deoxy-5-[3-(hydroxyamino)-3-oxo-1-propynyl]-, 3',5'-dibenzoate  
(9CI) (CA INDEX NAME)

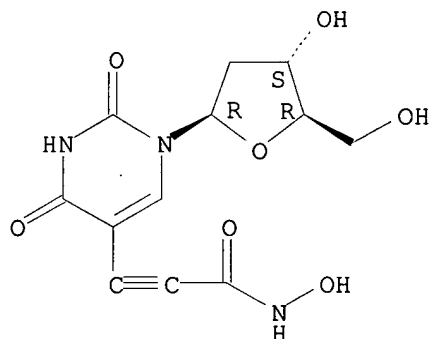
Absolute stereochemistry.



RN 216970-12-6 HCAPLUS

CN Uridine, 2'-deoxy-5-[3-(hydroxyamino)-3-oxo-1-propynyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 216970-12-6P

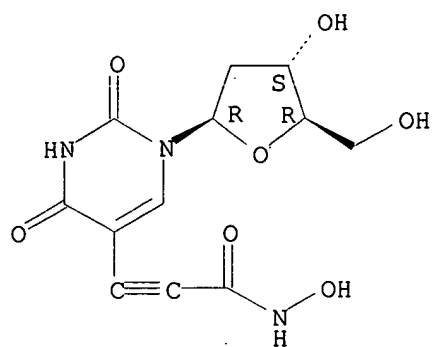
RL: SPN (Synthetic preparation); PREP (Preparation)  
(facile and convenient **solid-phase** procedure for  
**synthesizing** nucleoside hydroxamic acids)

RN 216970-12-6 HCAPLUS

CN Uridine, 2'-deoxy-5-[3-(hydroxyamino)-3-oxo-1-propynyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

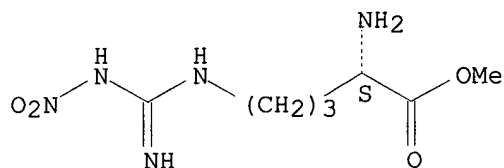




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=> d bib abs hitstr 9
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L23 ANSWER 9 OF 52 HCAPLUS COPYRIGHT1999 ACS  
AN 1998:656995 HCAPLUS  
DN 130:25289  
TI Solid and solution phase combinatorial synthesis of ureas  
AU Nieuwenhuijzen, Jose W.; Conti, Paolo G. M.; Ottenheijm, Harry C. J.;  
Linders, Joannes T. M.  
CS Scientific Development Group, NV Organon, Oss, 5340 BH, Neth.  
SO Tetrahedron Lett. (1998), 39(42), 7811-7813  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
OS CASREACT 130:25289  
AB An efficient parallel synthesis of ureas based on amino acids is  
described, both in soln. and on solid phase. 1,1'-  
Carbonylbisbenzotriazole is used as the coupling reagent. The ureas  
MeO2CCHR1NHCONHCHR2CO2Me and HO2CCHR1NHCONHCHR2CO2Me (R1 and R2 are amino  
acid side chains) were obtained in high yield (80-100%) and purity  
(71-97%).  
IT **50903-99-6**  
RL: RCT (Reactant)  
(solid and soln. phase combinatorial  
synthesis of ureas based on amino acids)  
RN 50903-99-6 HCAPLUS  
CN L-Ornithine, N5-[imino(nitroamino)methyl]-, methyl ester (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

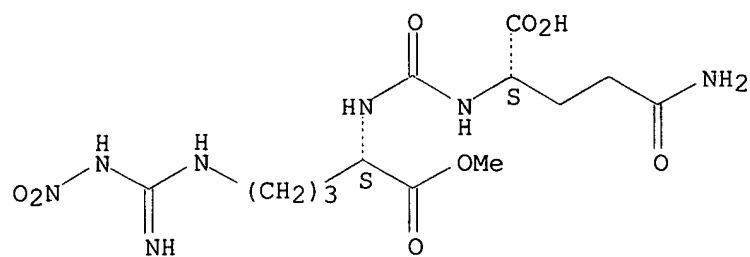


IT **216530-90-4P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(**solid** and soln. **phase** combinatorial  
**synthesis** of ureas based on amino acids)

RN 216530-90-4 HCAPLUS

CN L-Glutamine, N2-[[[(1S)-4-[[imino(nitroamino)methyl]amino]-1-(methoxycarbonyl)butyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

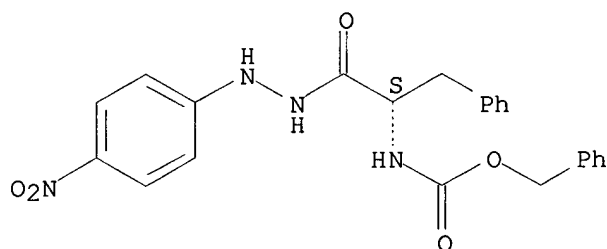
Absolute stereochemistry.



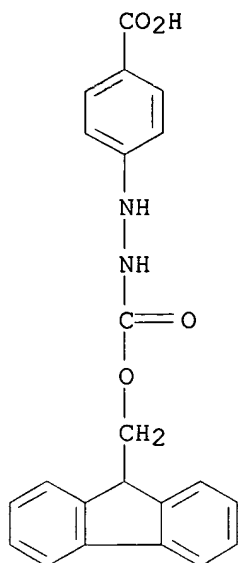
=> d bib abs hitstr 10

L23 ANSWER 10 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1998:603831 HCAPLUS  
DN 129:302815  
TI Aryl hydrazides as linkers for solid phase synthesis which are cleavable under mild oxidative conditions  
AU Millington, Christopher R.; Quarrell, Rachel; Lowe, Gordon  
CS Dyson Perrins Lab., Oxford Univ., Oxford, OX1 3QY, UK  
SO Tetrahedron Lett. (1998), 39(39), 7201-7204  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB The authors have developed an acid/base stable aryl hydrazide linker which is readily coupled to solid phase **resins**. Cleavage is specific and facile, requiring a copper (II) catalyst, base and a nucleophile to proceed. The conditions are compatible with all 20 proteinogenic amino acids quant. cleavage is achieved within 2 h at 20.degree. to give peptides with C-terminal acid, amide or ester functionalities. Aryl hydrazides also offer scope as simple "traceless" linkers.  
IT **23912-56-3 214475-53-3**  
RL: RCT (Reactant)  
(aryl hydrazides as linkers for **solid phase synthesis** which are cleavable under mild oxidative conditions)  
RN 23912-56-3 HCAPLUS  
CN L-Phenylalanine, N-[(phenylmethoxy)carbonyl]-, 2-(4-nitrophenyl)hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 214475-53-3 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-(4-carboxyphenyl)-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)



IT 214475-42-0P

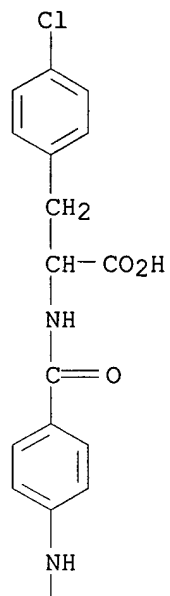
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(aryl hydrazides as linkers for **solid phase**

**synthesis** which are cleavable under mild oxidative conditions)

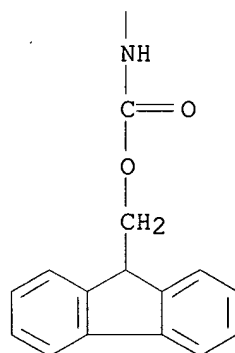
RN 214475-42-0 HCAPLUS

CN Hydrazinecarboxylic acid, 2-[4-[[[1-carboxy-2-(4-chlorophenyl)ethyl]amino]carbonyl]phenyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



reaction of XLONR3COR2 (X = solid support; L = null, linking group; R2, R3 = aryl, alipharyl) with R1M (R1 as above; M = metal) followed by liberation of the ketone from the **resin**. Thus,

N-4-bromobenzyl-N-4-phenylbutanoyl-4-O-(methylhydroxylamine)phenoxymethyl-copoly(styrene-divinylbenzene)**resin** (prepn. given) in Et2O was treated with EtMgBr in THF followed by 18 h agitation to give 6-phenylhexan-3-one.

IT 1613-88-3P, N-Hydroxy-4-chlorobenzamide 67363-26-2P

200643-18-1P 210227-96-6P 210228-07-2P

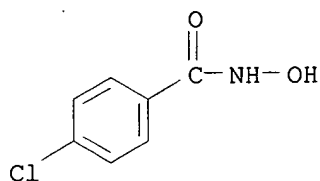
210228-14-1P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(solid phase synthesis of aldehydes, ketones, oximes, amines and hydroxamic acids)

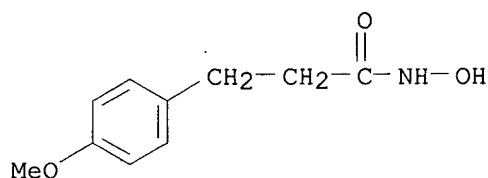
RN 1613-88-3 HCAPLUS

CN Benzamide, 4-chloro-N-hydroxy- (9CI) (CA INDEX NAME)



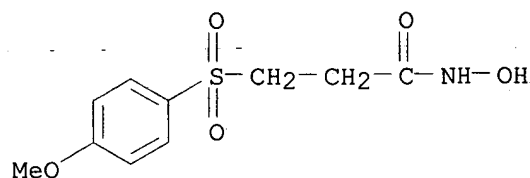
RN 67363-26-2 HCAPLUS

CN Benzenepropanamide, N-hydroxy-4-methoxy- (9CI) (CA INDEX NAME)



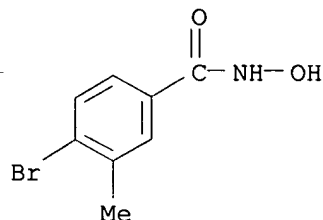
RN 200643-18-1 HCAPLUS

CN Propanamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



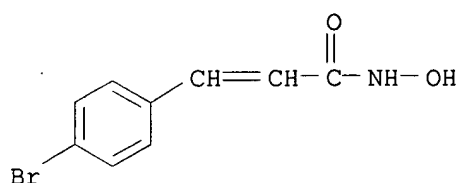
RN 210227-96-6 HCAPLUS

CN Benzamide, 4-bromo-N-hydroxy-3-methyl- (9CI) (CA INDEX NAME)



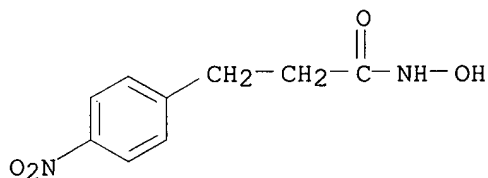
RN 210228-07-2 HCAPLUS

CN 2-Propenamide, 3-(4-bromophenyl)-N-hydroxy- (9CI) (CA INDEX NAME)



RN 210228-14-1 HCAPLUS

CN Benzenepropanamide, N-hydroxy-4-nitro- (9CI) (CA INDEX NAME)



IT 210227-92-2DP, copoly(styrene-divinylbenzene)-bound

210227-93-3DP, copoly(styrene-divinylbenzene)-bound

210227-95-5DP, copoly(styrene-divinylbenzene)-bound

210228-03-8DP, copoly(styrene-divinylbenzene)-bound

210228-05-0DP, copoly(styrene-divinylbenzene)-bound

210228-06-1DP, copoly(styrene-divinylbenzene)-bound

210228-08-3DP, copoly(styrene-divinylbenzene)-bound

210228-10-7DP, copoly(styrene-divinylbenzene)-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

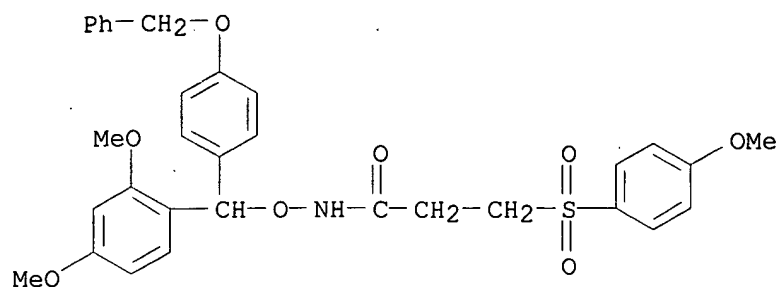
(solid phase synthesis of aldehydes,

ketones, oximes, amines and hydroxamic acids)

RN 210227-92-2 HCAPLUS

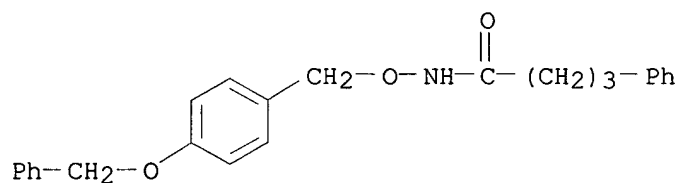
CN Propanamide, N-[(2,4-dimethoxyphenyl)[4-(phenylmethoxy)phenyl]methoxy]-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)





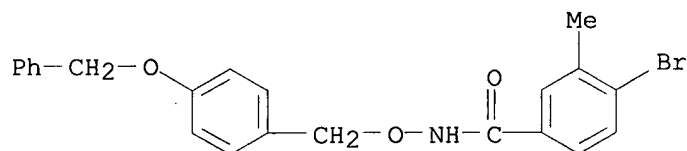
RN 210227-93-3 HCAPLUS

CN Benzenebutamide, N-[[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA INDEX NAME)



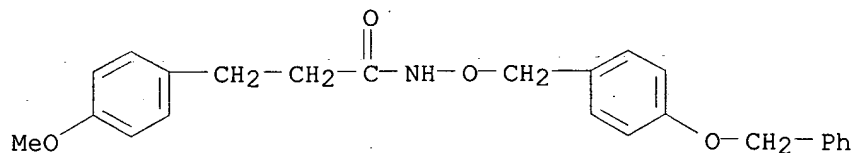
RN 210227-95-5 HCAPLUS

CN Benzenebutamide, 4-bromo-3-methyl-N-[[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA INDEX NAME)



RN 210228-03-8 HCAPLUS

CN Benzenepropanamide, 4-methoxy-N-[[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA INDEX NAME)

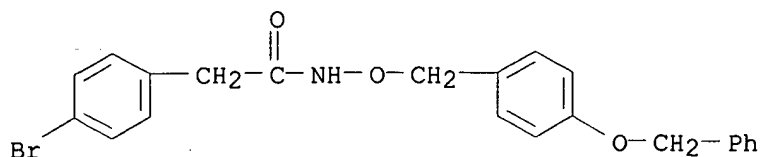


RN 210228-05-0 HCAPLUS

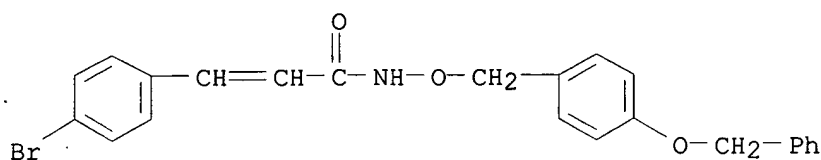
CN Benzeneacetamide, 4-bromo-N-[[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA INDEX NAME)

Searched by John Dantzman

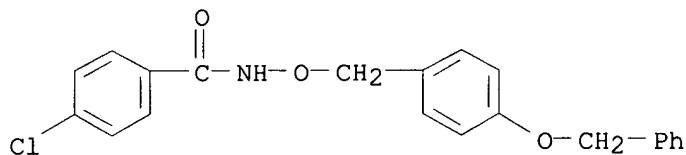
308-4488



RN 210228-06-1 HCAPLUS

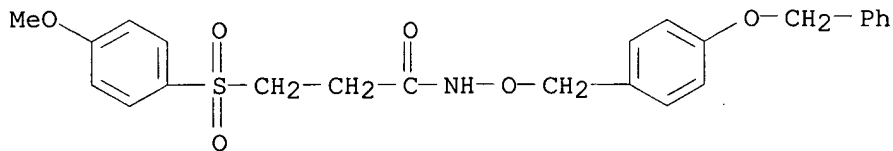
CN 2-Propenamide, 3-(4-bromophenyl)-N-[[4-(phenylmethoxy)phenyl]methoxy]-  
(9CI) (CA INDEX NAME)

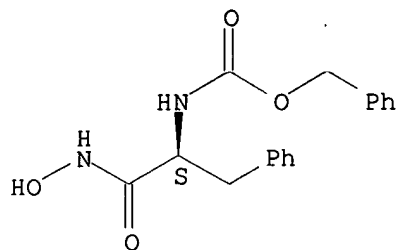
RN 210228-08-3 HCAPLUS

CN Benzamide, 4-chloro-N-[[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA  
INDEX  
NAME)

RN 210228-10-7 HCAPLUS

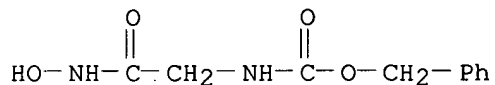
CN Propanamide, 3-[(4-methoxyphenyl)sulfonyl]-N-[[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA INDEX NAME)





RN 76960-28-6 HCAPLUS

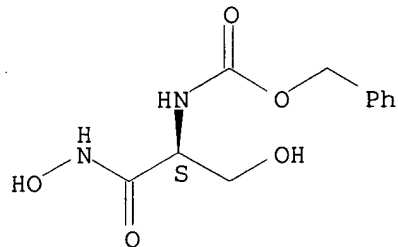
CN Carbamic acid, [2-(hydroxyamino)-2-oxoethyl]-, phenylmethyl ester (9CI)  
(CA INDEX NAME)



RN 88144-07-4 HCAPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-(hydroxymethyl)-2-oxoethyl]-,  
phenylmethyl ester (9CI) (CA INDEX NAME)

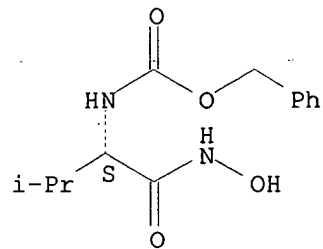
Absolute stereochemistry.



RN 107145-27-7 HCAPLUS

CN Carbamic acid, [(1S)-1-[(hydroxyamino)carbonyl]-2-methylpropyl]-,  
phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



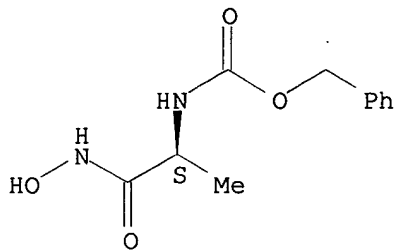
RN 160056-97-3 HCAPLUS

Searched by John Dantzman

308-4488

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-methyl-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

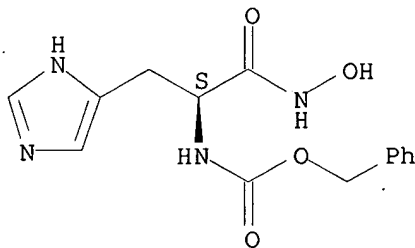
Absolute stereochemistry.



RN 211232-25-6 HCAPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

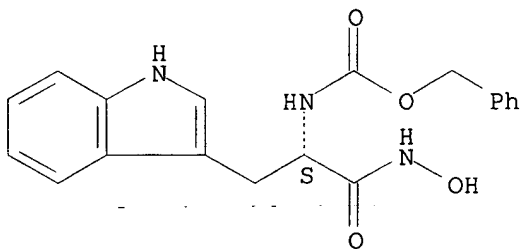
Absolute stereochemistry.



RN 211232-26-7 HCAPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



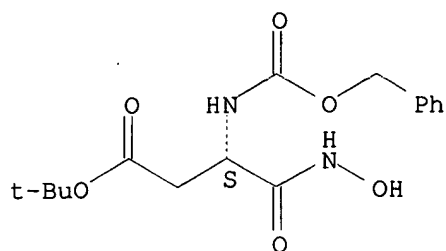
RN 211232-27-8 HCAPLUS

CN Butanoic acid, 4-(hydroxyamino)-4-oxo-3-[[ (phenylmethoxy) carbonyl] amino]-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Searched by John Dantzman

308-4488

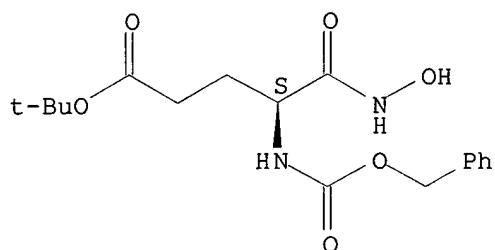


RN 211232-28-9 HCAPLUS

CN Pentanoic acid,

5-(hydroxyamino)-5-oxo-4-[[4-(1,1-dimethylethoxy)phenyl]methyl]-  
, 1,1-dimethylethyl ester, (4S)- (9CI) (CA INDEX NAME)

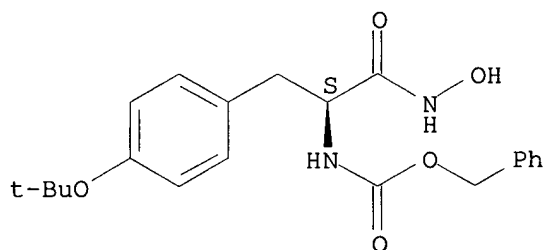
Absolute stereochemistry.



RN 211232-29-0 HCAPLUS

CN Carbamic acid, [(1S)-1-[[4-(1,1-dimethylethoxy)phenyl]methyl]-2-  
(hydroxyamino)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

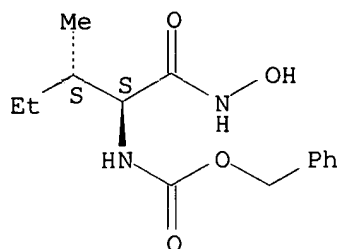
Absolute stereochemistry.



RN 211232-30-3 HCAPLUS

CN Carbamic acid, [(1S,2S)-1-[(hydroxyamino)carbonyl]-2-methylbutyl]-,  
phenylmethyl ester (9CI) (CA INDEX NAME)

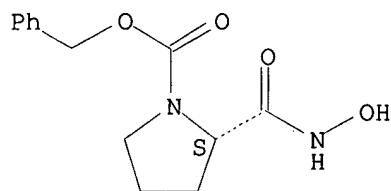
Absolute stereochemistry.



RN 211232-31-4 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(hydroxyamino)carbonyl]-, phenylmethyl ester, (2S)- (9CI) (CA INDEX NAME)

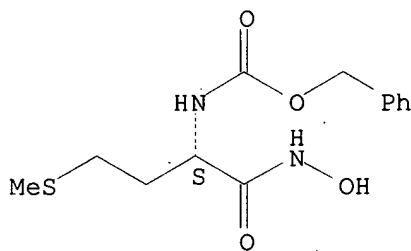
Absolute stereochemistry.



RN 211232-32-5 HCAPLUS

CN Carbamic acid, [(1S)-1-[(hydroxyamino)carbonyl]-3-(methylthio)propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

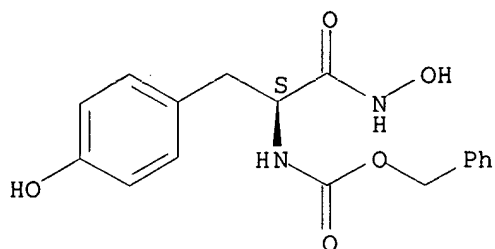
Absolute stereochemistry.



RN 211232-33-6 HCAPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-[(4-hydroxyphenyl)methyl]-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

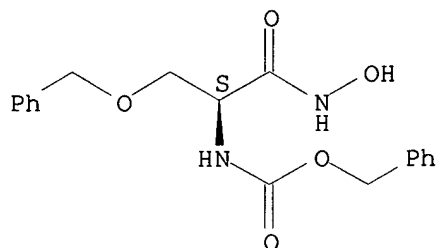
Absolute stereochemistry.



RN 211232-34-7 HCAPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

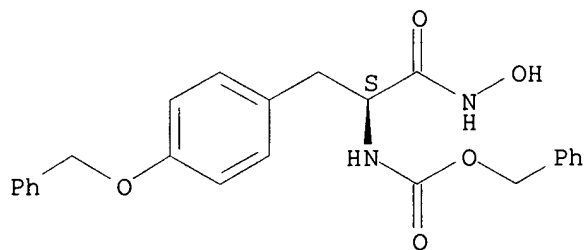
Absolute stereochemistry.



RN 211232-35-8 HCAPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-2-oxo-1-[[4-(phenylmethoxy)phenyl]methyl]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

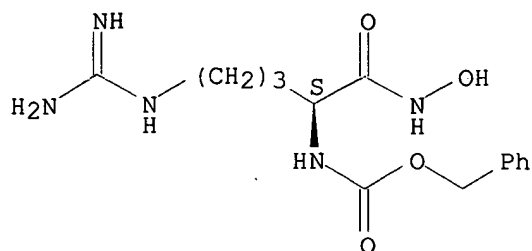
Absolute stereochemistry.



RN 211232-36-9 HCAPLUS

CN Carbamic acid, [(1S)-4-[(aminoiminomethyl)amino]-1-[(hydroxyamino)carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

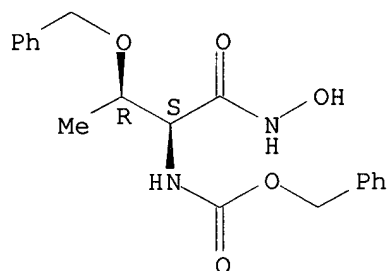
Absolute stereochemistry.



RN 211232-37-0 HCAPLUS

CN Carbamic acid, [(1S,2R)-1-[(hydroxyamino)carbonyl]-2-(phenylmethoxy)propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

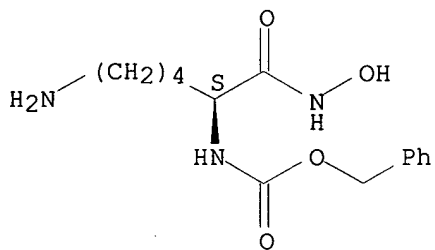
Absolute stereochemistry.



RN 211232-38-1 HCAPLUS

CN Carbamic acid, [(1S)-5-amino-1-[(hydroxyamino)carbonyl]pentyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

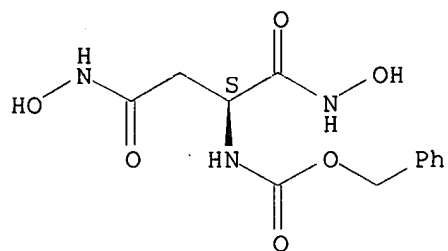


RN 211232-39-2 HCAPLUS

CN Carbamic acid, [(1S)-3-(hydroxyamino)-1-[(hydroxyamino)carbonyl]-3-oxopropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

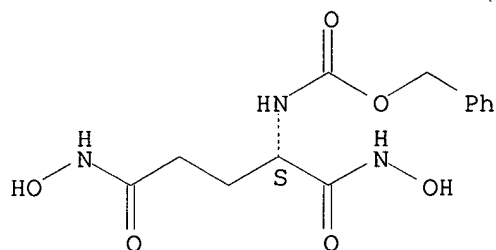


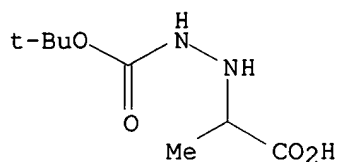


RN 211232-40-5 HCAPLUS

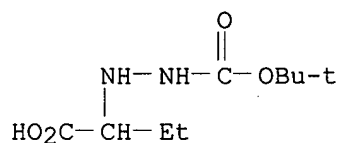
CN Carbamic acid, [(1S)-4-(hydroxyamino)-1-[(hydroxyamino)carbonyl]-4-oxobutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

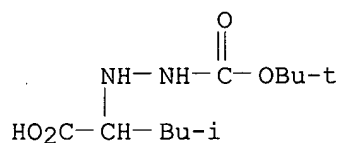




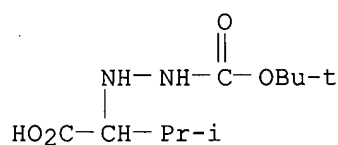
RN 211107-24-3 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-(1-carboxypropyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



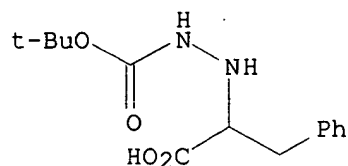
RN 211107-25-4 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-(1-carboxy-3-methylbutyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 211107-29-8 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-(1-carboxy-2-methylpropyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



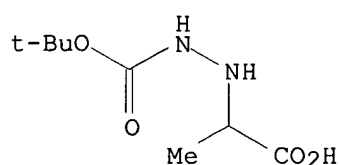
IT 14381-08-9DP, polymer-bound 54600-94-1DP, polymer-bound 70744-14-8DP, polymer-bound 115262-99-2DP, polymer-bound 211107-24-3DP, polymer-bound 211107-25-4DP, polymer-bound 211107-27-6DP, polymer-bound 211107-29-8DP, polymer-bound  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (solid phase synthesis of 1-aminohydantoin libraries)  
RN 14381-08-9 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-(1-carboxy-2-phenylethyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



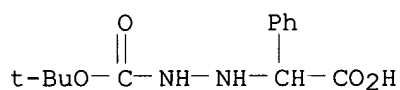
RN 54600-94-1 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxyethyl)-, 1-(1,1-dimethylethyl)  
ester

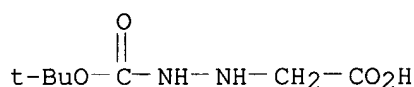
(9CI) (CA INDEX NAME)



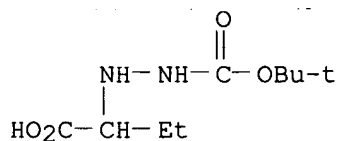
RN 70744-14-8 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(carboxyphenylmethyl)-, 1-(1,1-dimethylethyl)  
ester (9CI) (CA INDEX NAME)

RN 115262-99-2 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(carboxymethyl)-, 1-(1,1-dimethylethyl) ester  
(9CI) (CA INDEX NAME)

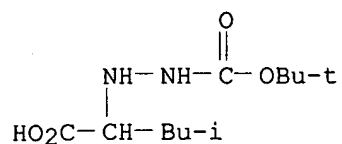
RN 211107-24-3 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxypropyl)-, 1-(1,1-dimethylethyl)  
ester (9CI) (CA INDEX NAME)

RN 211107-25-4 HCAPLUS

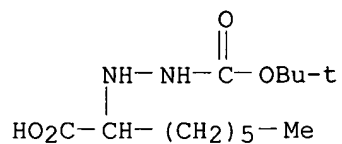
CN Hydrazinecarboxylic acid, 2-(1-carboxy-3-methylbutyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Searched by John Dantzman 308-4488



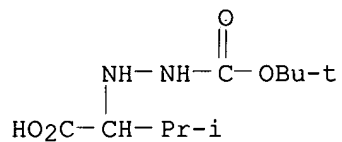
RN 211107-27-6 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxyheptyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 211107-29-8 HCAPLUS

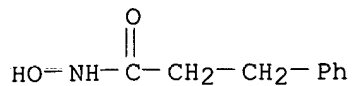
CN Hydrazinecarboxylic acid, 2-(1-carboxy-2-methylpropyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



=> d bib abs hitstr 14

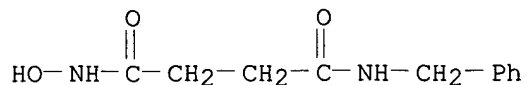
L23 ANSWER 14 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1998:293467 HCAPLUS  
DN 129:4503  
TI Solid-phase synthesis of hydroxylamine compounds, derivatives, and  
combinatorial libraries thereof  
IN Patel, Dinesh; Nhu, Khehyong  
PA Versicor, Inc., USA; Patel, Dinesh; Nhu, Khehyong  
SO PCT Int. Appl., 98 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 9818754	A1	19980507	WO 1997-US19481	19971027
	W:		AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG		
	AU 9854263	A1	19980522	AU 1998-54263	19971027
PRAI	US 1996-29788		19961028		
	US 1997-47468		19970523		
	WO 1997-US19481		19971027		
OS	CASREACT 129:4503; MARPAT 129:4503				
AB	A library comprising a plurality of hydroxylamine and/or hydroxylamine derivs. wherein the library is prepd. by prepg. a solid support-bound alkoxyamine, derivatizing the supported alkoxyamine, cleaving the derivatized alkoxyamine from the support, and removing the alkoxy protecting group, is claimed. Thus, 4-hydroxymethylphenoxy <b>resin</b> was brominated with PPh3.Br2 in CH2Cl2 to give 99% bromomethylphenoxy <b>resin</b> . This was treated with PhCH2ONH2 and K2CO3 in EtOAc/H2O to give benzyloxyamine <b>resin</b> , which was treated with PhCH2CH2COCl and 2,6-di-tert-butyl-4-methylpyridine in DMF to give N-acylated material. The latter was treated with CF3CO2H to afford PhCH2CH2CONHOCH2Ph, which was hydrogenated in MeOH over Pd/C to afford PhCH2CH2CONHOH.				
IT	17698-11-2P 56439-40-8P 161313-73-1P 193807-79-3P 207462-42-8P				
	RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (solid-phase synthesis of hydroxylamine compds., derivs., and combinatorial libraries thereof)				
RN	17698-11-2 HCAPLUS				
CN	Benzenepropanamide, N-hydroxy- (9CI) (CA INDEX NAME)				



RN 56439-40-8 HCAPLUS

CN Butanediamide, N-hydroxy-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)

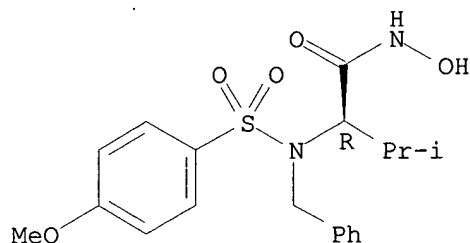


RN 161313-73-1 HCAPLUS

CN Butanamide,

N-hydroxy-2-[[ (4-methoxyphenyl) sulfonyl] (phenylmethyl) amino]-3-methyl-, (2R)- (9CI) (CA INDEX NAME)

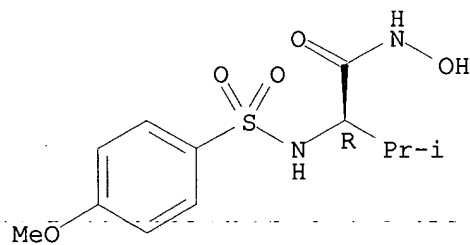
Absolute stereochemistry.



RN 193807-79-3 HCAPLUS

CN Butanamide, N-hydroxy-2-[[ (4-methoxyphenyl) sulfonyl] amino]-3-methyl-, (2R)- (9CI) (CA INDEX NAME)

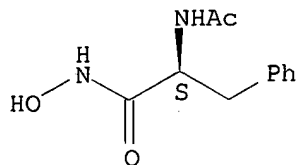
Absolute stereochemistry. Rotation (-).



RN 207462-42-8 HCAPLUS

CN Benzenepropanamide, .alpha.-(acetylamino)-N-hydroxy-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

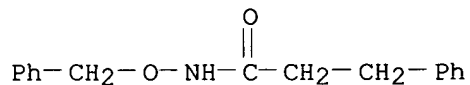


IT 22426-87-5P 153720-65-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis of hydroxylamine  
compds., derivs., and combinatorial libraries thereof)

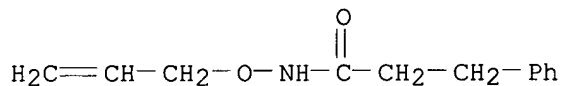
RN 22426-87-5 HCAPLUS

CN Benzenepropanamide, N-(phenylmethoxy)- (9CI) (CA INDEX NAME)



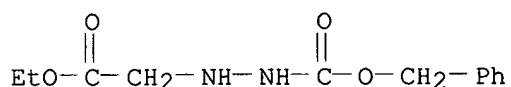
RN 153720-65-1 HCAPLUS

CN Benzenepropanamide, N-(2-phenyloxy)- (9CI) (CA INDEX NAME)

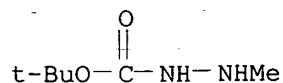


=> d bib abs hitstr 15

L23 ANSWER 15 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1998:13243 HCAPLUS  
DN 128:102365  
TI Triphosgene: an efficient carbonylating agent for liquid and solid-phase  
aza-peptide synthesis. Application to the synthesis of two aza-analogs of  
the AChR MIR decapeptide  
AU Andre, Frederic; Marraud, Michel; Tsouloufis, Theodoros; Tzartos,  
Socrates  
J.; Boussard, Guy  
CS LCPM, CNRS-URA-494, ENSIC-INPL, Nancy, 54001, Fr.  
SO J. Pept. Sci. (1997), 3(6), 429-441  
CODEN: JPSIEI; ISSN: 1075-2617  
PB John Wiley & Sons Ltd.  
DT Journal  
LA English  
AB The N.alpha./C.alpha.H exchange in aza-peptides has the advantage of  
preserving the side chain. Bis(trichloromethyl)carbonate or triphosgene  
is a solid, stable phosgene substitute which retains its high reactivity.  
Temp. and coupling times are greatly reduced with ref. to other usually  
recommended carbonylating agents, while purity and yield are increased.  
It has been used, in both liq.-and solid-phase procedures, for the  
synthesis of various aza-analogs of dipeptides, tripeptides and  
decapeptides contg. the alanine, aspartic acid and asparagine  
aza-residue.  
IT **4503-58-6P 127799-54-6P 201297-68-9P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(triphosgene as efficient carbonylating agent for liq. and  
**solid-phase aza-peptide synthesis**)  
RN 4503-58-6 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-(2-ethoxy-2-oxoethyl)-, phenylmethyl ester  
(9CI) (CA INDEX NAME)



RN 127799-54-6 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-methyl-, 1,1-dimethylethyl ester (9CI) (CA  
INDEX NAME)



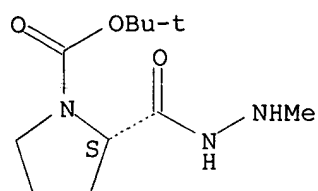
RN 201297-68-9 HCAPLUS  
CN 1,2-Pyrrolidinedicarboxylic acid, 1-(1,1-dimethylethyl) ester,  
2-(2-methylhydrazide), (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Searched by John Dantzman

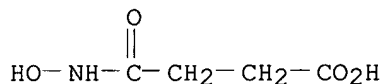
308-4488





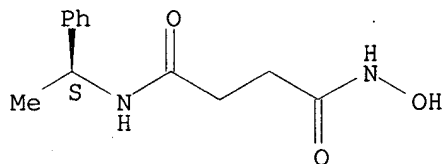
=> d bib abs hitstr 16

L23 ANSWER 16 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1997:707389 HCAPLUS  
DN 127:358497  
TI A novel linkage for the solid-phase synthesis of hydroxamic acids  
AU Bauer, Udo; Ho, Wen-Bin; Koskinen, Ari M. P.  
CS Department of Chemistry, University of Oulu, Oulu, FI-90571, Finland  
SO Tetrahedron Lett. (1997), 38(41), 7233-7236  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier  
DT Journal  
LA English  
OS CASREACT 127:358497  
AB A novel linkage for the solid-phase synthesis of hydroxamic acids using trityl chloride **resin** as the base matrix is described. Its facile application for the solid-phase synthesis of peptidyl, succinyl, and urea-type hydroxamic acids is illustrated. Cleavage is induced under mild acidic conditions by treatment with formic acid in THF, providing hydroxamic acids in high purity and fair to good yields.  
IT **4743-99-1DP, resin bound 198565-50-3DP, resin bound 198565-51-4DP, resin bound 198565-52-5DP, resin bound**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (linkage for **solid-phase synthesis** of hydroxamic acids)  
RN 4743-99-1 HCAPLUS  
CN Butanoic acid, 4-(hydroxyamino)-4-oxo- (9CI) (CA INDEX NAME)



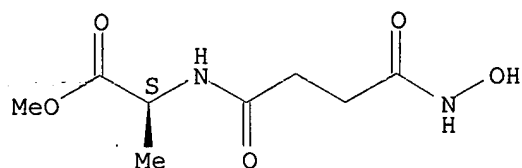
RN 198565-50-3 HCAPLUS  
CN Butanediamide, N-hydroxy-N'-(1-phenylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 198565-51-4 HCAPLUS  
CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI) (CA INDEX NAME)

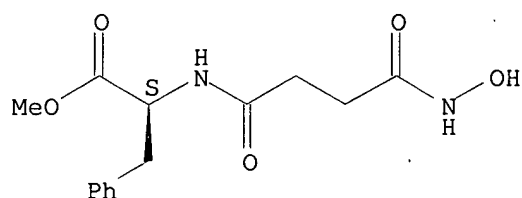
Absolute stereochemistry.



RN 198565-52-5 HCAPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



IT 24966-37-8P 198565-50-3P 198565-51-4P

198565-52-5P 198565-53-6P 198565-54-7P

198565-55-8P 198565-56-9P 198565-57-0P

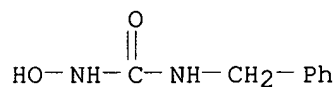
198565-58-1P 198565-59-2P 198565-60-5P

198565-61-6P 198565-62-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(linkage for **solid-phase synthesis** of  
hydroxamic acids)

RN 24966-37-8 HCAPLUS

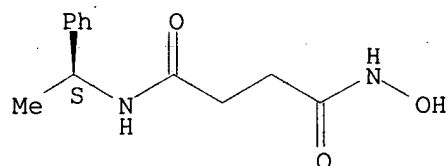
CN Urea, N-hydroxy-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 198565-50-3 HCAPLUS

CN Butanediamide, N-hydroxy-N'-(1-phenylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



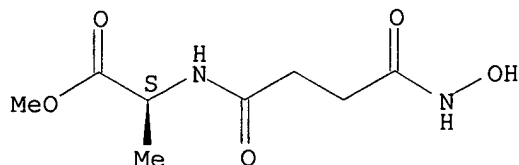
RN 198565-51-4 HCAPLUS

CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI) (CA  
INDEX NAME)

Searched by John Dantzman

308-4488

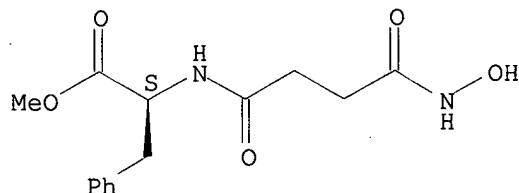
Absolute stereochemistry.



RN 198565-52-5 HCAPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI)  
(CA INDEX NAME)

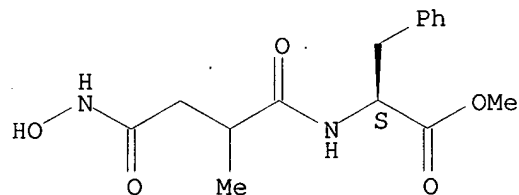
Absolute stereochemistry.



RN 198565-53-6 HCAPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-2-methyl-1,4-dioxobutyl]-, methyl ester (9CI) (CA INDEX NAME)

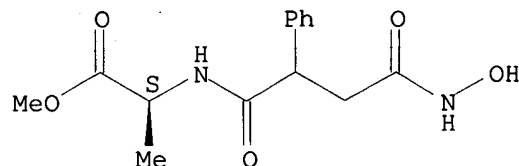
Absolute stereochemistry.



RN 198565-54-7 HCAPLUS

CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxo-2-phenylbutyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

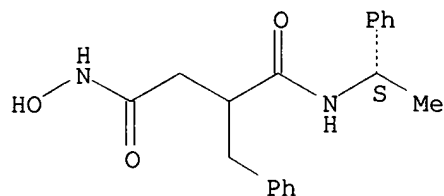


RN 198565-55-8 HCAPLUS

CN Butanediamide, N4-hydroxy-N1-(1-phenylethyl)-2-(phenylmethyl)-, [1(S)]-  
Searched by John Dantzman 308-4488

(9CI) (CA INDEX NAME)

Absolute stereochemistry.



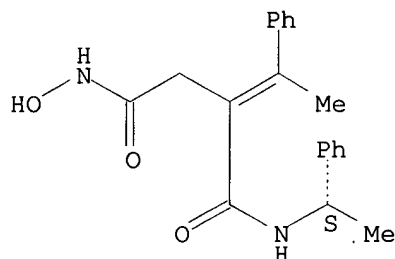
RN 198565-56-9 HCAPLUS

CN Butanediamide, N4-hydroxy-N1-(1-phenylethyl)-2-(1-phenylethylidene)-,  
(S)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

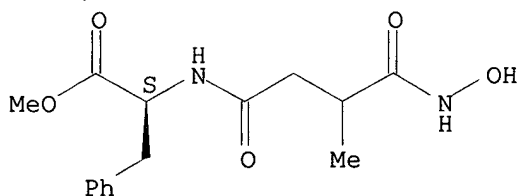
Double bond geometry unknown.



RN 198565-57-0 HCAPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-3-methyl-1,4-dioxobutyl]-, methyl  
ester (9CI) (CA INDEX NAME)

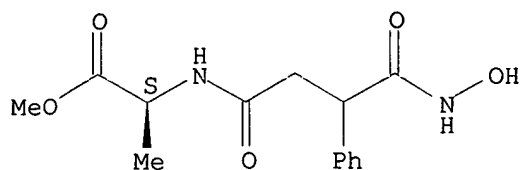
Absolute stereochemistry.



RN 198565-58-1 HCAPLUS

CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxo-3-phenylbutyl]-, methyl ester  
(9CI) (CA INDEX NAME)

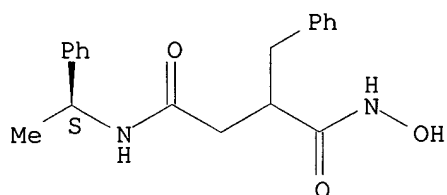
Absolute stereochemistry.



RN 198565-59-2 HCAPLUS

CN Butanediamide, N1-hydroxy-N4-(1-phenylethyl)-2-(phenylmethyl)-, [4(S)]-(9CI) (CA INDEX NAME)

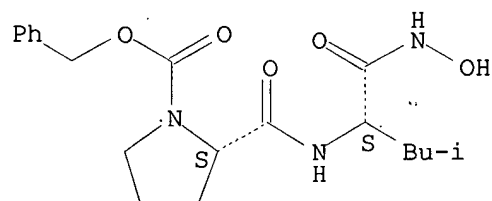
Absolute stereochemistry.



RN 198565-60-5 HCAPLUS

CN L-Leucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

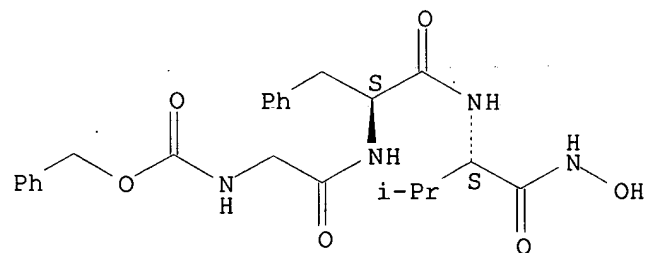
Absolute stereochemistry.



RN 198565-61-6 HCAPLUS

CN L-Valinamide, N-[(phenylmethoxy)carbonyl]glycyl-L-phenylalanyl-N-hydroxy-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

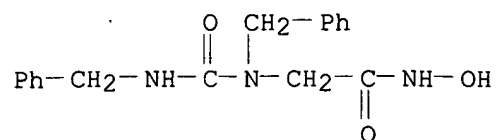


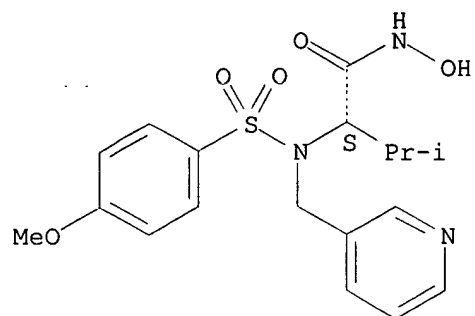
RN 198565-62-7 HCAPLUS

Searched by John Dantzman

308-4488

CN Acetamide,  
N-hydroxy-2-[(phenylmethyl)[[(phenylmethyl)amino]carbonyl]amino  
]- (9CI) (CA INDEX NAME)

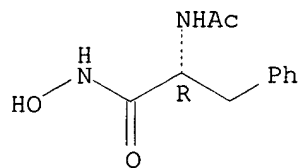




RN 197304-28-2 HCAPLUS

CN Benzenepropanamide, .alpha.-(acetylamino)-N-hydroxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

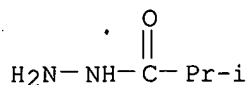




.beta.-sheet structures)

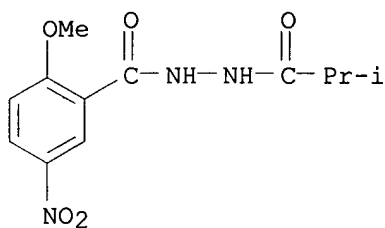
RN 3619-17-8 HCAPLUS

CN Propanoic acid, 2-methyl-, hydrazide (9CI) (CA INDEX NAME)



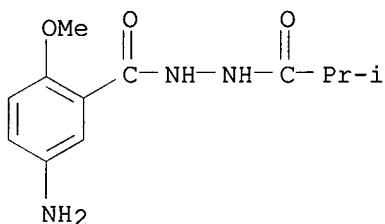
RN 194025-94-0 HCAPLUS

CN Benzoic acid, 2-methoxy-5-nitro-, 2-(2-methyl-1-oxopropyl)hydrazide (9CI)  
(CA INDEX NAME)



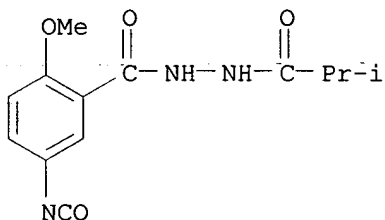
RN 194025-95-1 HCAPLUS

CN Benzoic acid, 5-amino-2-methoxy-, 2-(2-methyl-1-oxopropyl)hydrazide (9CI)  
(CA INDEX NAME)



RN 194025-96-2 HCAPLUS

CN Benzoic acid, 5-isocyanato-2-methoxy-, 2-(2-methyl-1-oxopropyl)hydrazide  
(9CI) (CA INDEX NAME)



IT 190248-41-0P 194025-83-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

Searched by John Dantzman

308-4488

(solid-phase synthesis of artificial  
.beta.-sheet structures)

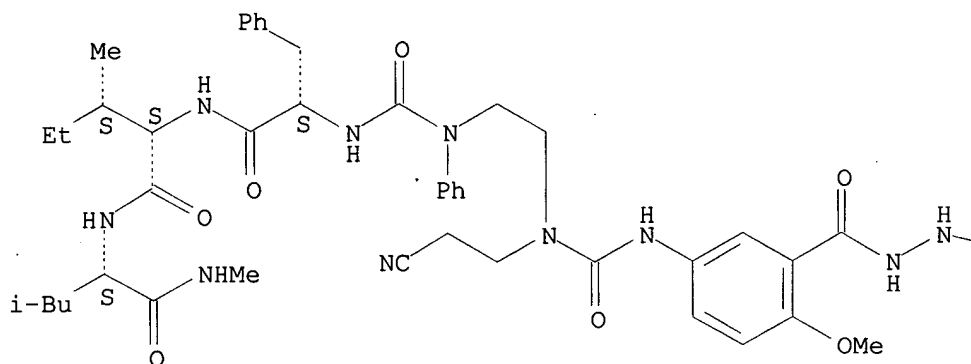
RN 190248-41-0 HCAPLUS

CN L-Leucinamide, N-[[[2-[(2-cyanoethyl)[[4-methoxy-3-[[2-[4-methoxy-3-

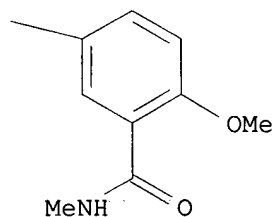
[(methylamino)carbonyl]phenyl]hydrazino]carbonyl]phenyl]amino]carbonyl]amino]ethyl]phenylamino]carbonyl]-L-phenylalanyl-L-isoleucyl-N-methyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RN 194025-83-7 HCAPLUS

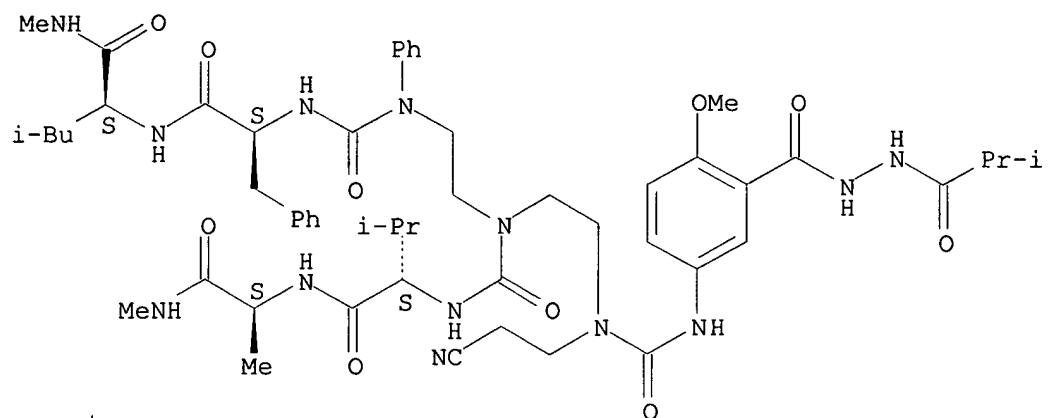
CN L-Leucinamide, N-[[[2-[carboxy[2-[(2-cyanoethyl)[[4-methoxy-3-[[2-(2-

methyl-1-oxopropyl)hydrazino]carbonyl]phenyl]amino]carbonyl]amino]ethyl]amino]ethyl]phenylamino]carbonyl]-L-phenylalanyl-N-methyl-,  
(1.fwdarw.1')-amide with L-valyl-N-methyl-L-alaninamide (9CI) (CA INDEX NAME)

Searched by John Dantzman

308-4488

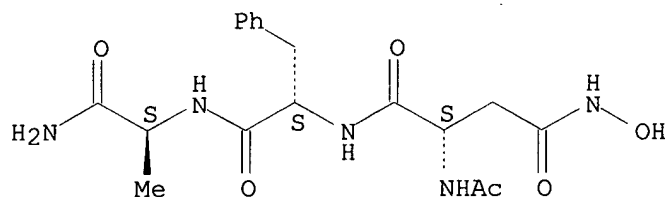
Absolute stereochemistry.



=> d bib abs hitstr 19

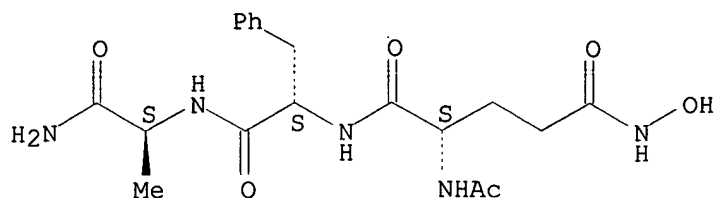
L23 ANSWER 19 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1997:168915 HCAPLUS  
DN 126:251406  
TI Solid phase synthesis of peptide hydroxamic acids  
AU Chen, Jack J.; Spatola, Arno F.  
CS Dep. Chem., Univ. Louisville, Louisville, KY, 40292, USA  
SO Tetrahedron Lett. (1997), 38(9), 1511-1514  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier  
DT Journal  
LA English  
AB The synthesis of peptide hydroxamic acids has been performed on a solid support. A carboxyl group of a peptide synthesized on para-methylbenzhydrylamine (pMBHA) **resin** was converted to a hydroxamate functional group by condensing with NH<sub>2</sub>OBzl, which was found preferable to NH<sub>2</sub>OtBu or NH<sub>2</sub>OTrt. The hydroxamate benzyl protecting group was removed subsequently during HF cleavage of the peptide **resin**. Five peptide hydroxamic acids were prep'd. according to this new method.  
IT 188730-77-0P 188730-79-2P 188730-81-6P  
188730-83-8P 188730-84-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid phase synthesis of peptide hydroxamic acids)  
RN 188730-77-0 HCAPLUS  
CN L-Alaninamide, N2-acetyl-N-hydroxy-L-asparaginyl-L-phenylalanyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



RN 188730-79-2 HCAPLUS  
CN L-Alaninamide, N2-acetyl-N-hydroxy-L-glutaminyl-L-phenylalanyl- (9CI)  
(CA INDEX NAME)

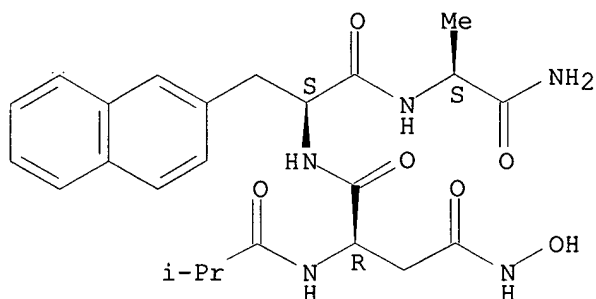
Absolute stereochemistry.



RN 188730-81-6 HCAPLUS

CN L-Alaninamide, N-hydroxy-N2-(2-methyl-1-oxopropyl)-D-asparaginy-3-(2-naphthalenyl)-L-alanyl- (9CI) (CA INDEX NAME)

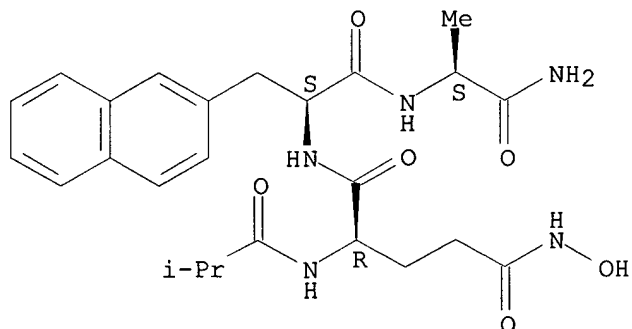
Absolute stereochemistry.



RN 188730-83-8 HCAPLUS

CN L-Alaninamide, N-hydroxy-N2-(2-methyl-1-oxopropyl)-D-glutaminy-3-(2-naphthalenyl)-L-alanyl- (9CI) (CA INDEX NAME)

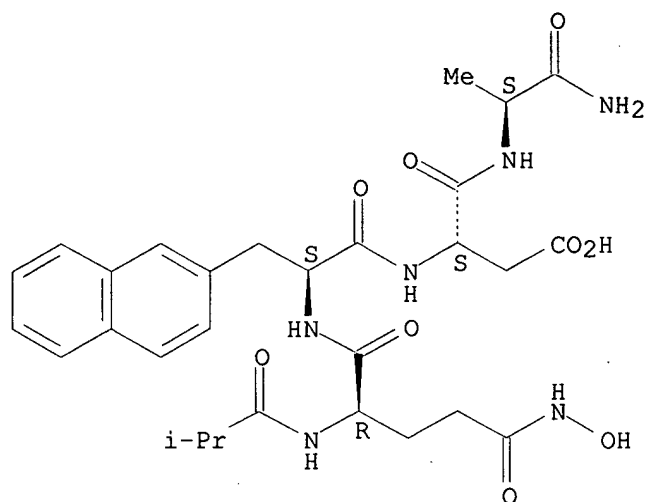
Absolute stereochemistry.



RN 188730-84-9 HCAPLUS

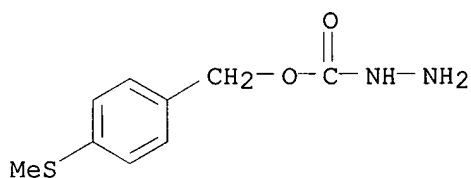
CN L-Alaninamide, N-hydroxy-N2-(2-methyl-1-oxopropyl)-D-glutaminy-3-(2-naphthalenyl)-L-alanyl-L.alpha.-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

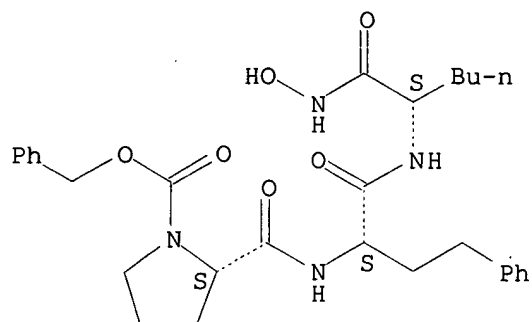


=> d bib abs hitstr 20

L23 ANSWER 20 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1997:80909 HCAPLUS  
DN 126:186355  
TI A reductive acidolysis final deprotection strategy in solid phase peptide synthesis based on safety-catch protection  
AU Kimura, Tooru; Fukui, Toshio; Tanaka, Shigeki; Akaji, Kenichi; Kiso, Yoshiaki  
CS Dep. Med. Chem., Kyoto Pharmaceutical Univ., Kyoto, 607, Japan  
SO Chem. Pharm. Bull. (1997), 45(1), 18-26  
CODEN: CPBTAL; ISSN: 0009-2363  
PB Pharmaceutical Society of Japan  
DT Journal  
LA English  
OS CASREACT 126:186355  
AB A reductive acidolysis final deprotection strategy in solid phase peptide synthesis was developed using a new safety-catch type of semi-permanent protecting groups and new linkers which were derived from 4-methylsulfinylbenzyl protection. This new strategy was based on a two-dimensional protection scheme employing acid-labile temporary and acid-stable but reductive acidolysis-cleavable semi-permanent protecting groups. Four model peptides were prepd. using this strategy, two of which contained C-terminal amides.  
IT **187280-02-0P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (reductive acidolysis final deprotection strategy in **solid phase peptide synthesis** based on methylsulfinylbenzyl safety-catch protection)  
RN 187280-02-0 HCAPLUS  
CN Hydrazinecarboxylic acid, [4-(methylthio)phenyl]methyl ester (9CI) (CA INDEX NAME)



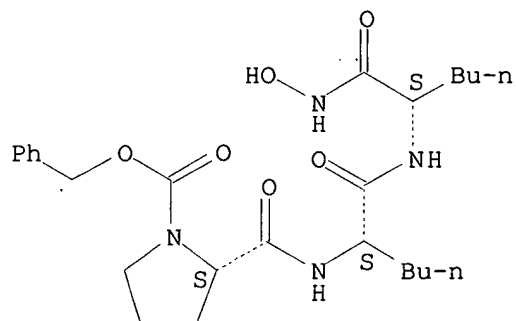
Absolute stereochemistry.



RN 184775-23-3 HCAPLUS

CN L-Norleucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

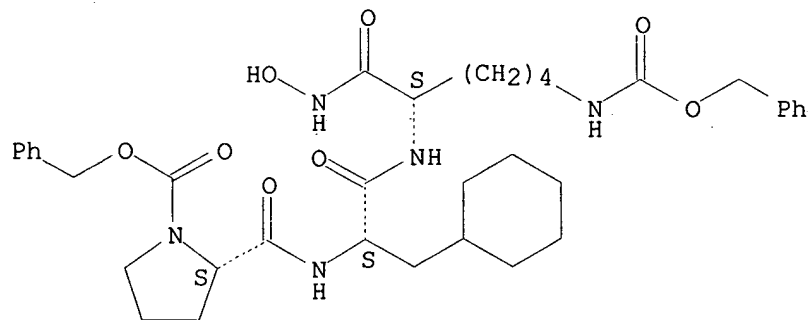
Absolute stereochemistry.



RN 184775-24-4 HCAPLUS

CN L-Lysinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-3-cyclohexyl-L-alanyl-N-hydroxy-N6-[(phenylmethoxy)carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



Searched by John Dantzman

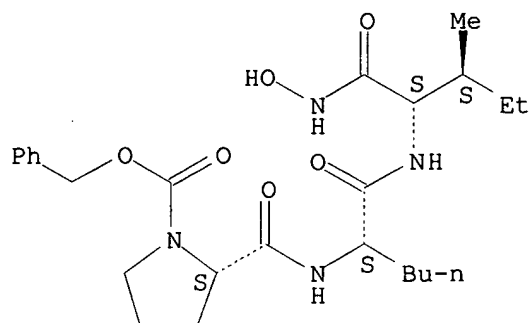
308-4488



RN 184775-25-5 HCAPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

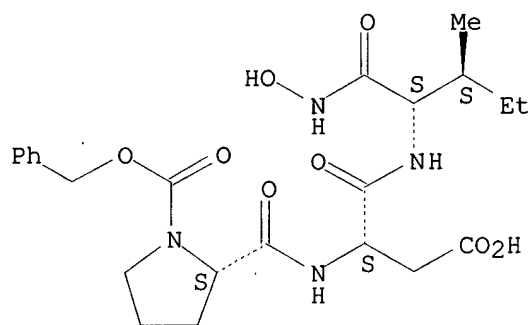
Absolute stereochemistry.



RN 184775-26-6 HCAPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-.alpha.-aspartyl-N-hydroxy- (9CI) (CA INDEX NAME)

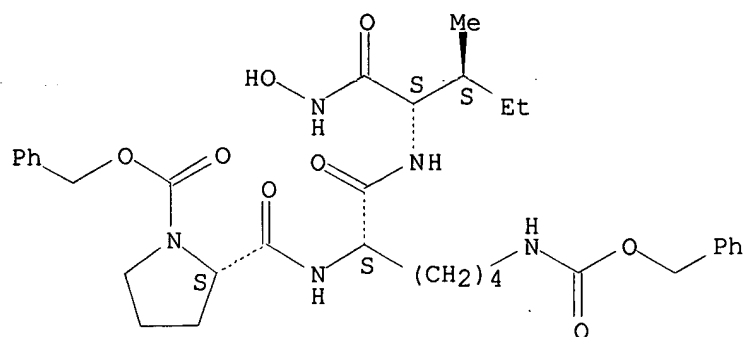
Absolute stereochemistry.



RN 184775-27-7 HCAPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

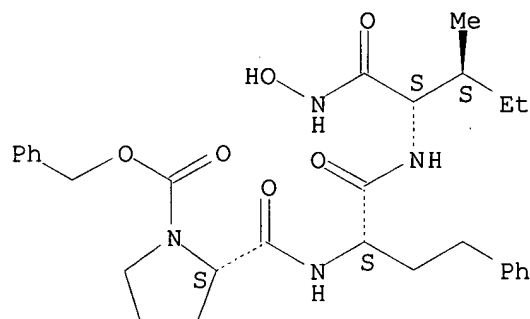


RN 184775-28-8 HCAPLUS

CN L-Isoleucinamide,

1-[(phenylmethoxy)carbonyl]-L-prolyl-(.alpha.S)-.alpha.-aminobenzenebutanoyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

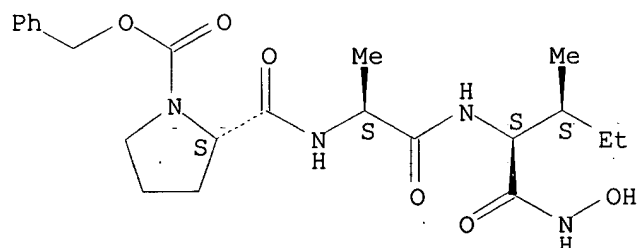


RN 184775-29-9 HCAPLUS

CN L-Isoleucinamide,

1-[(phenylmethoxy)carbonyl]-L-prolyl-L-alanyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



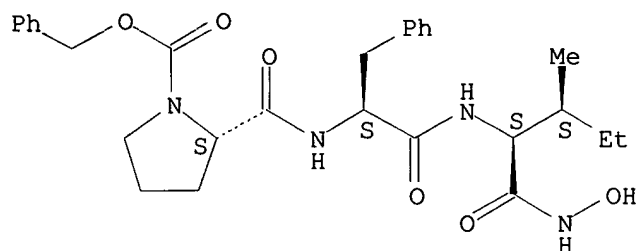
RN 184775-30-2 HCAPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-phenylalanyl-N-hydroxy- (9CI) (CA INDEX NAME)

Searched by John Dantzman

308-4488

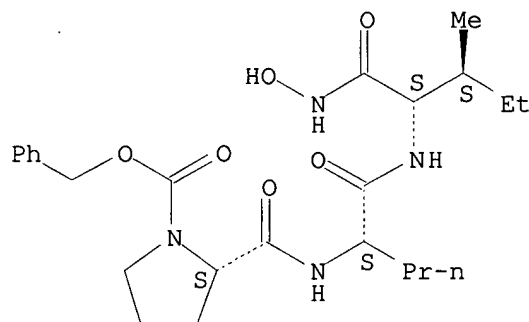
Absolute stereochemistry.



RN 184775-31-3 HCAPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-norvalyl-N-hydroxy- (9CI) (CA INDEX NAME)

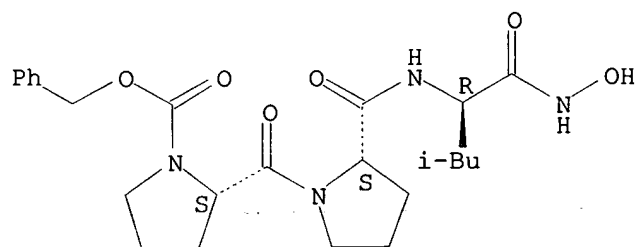
Absolute stereochemistry.



RN 184775-32-4 HCAPLUS

CN D-Leucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

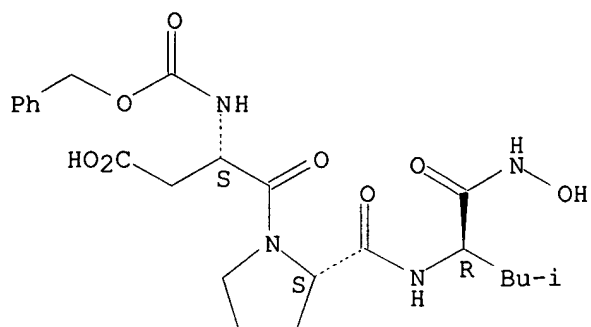
Absolute stereochemistry.



RN 184775-33-5 HCAPLUS

CN D-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-.alpha.-aspartyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

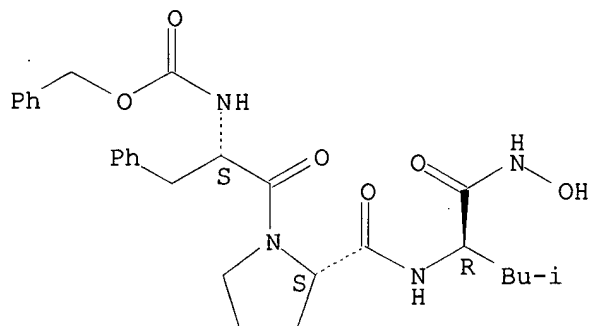
Absolute stereochemistry.



RN 184775-34-6 HCAPLUS

CN D-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

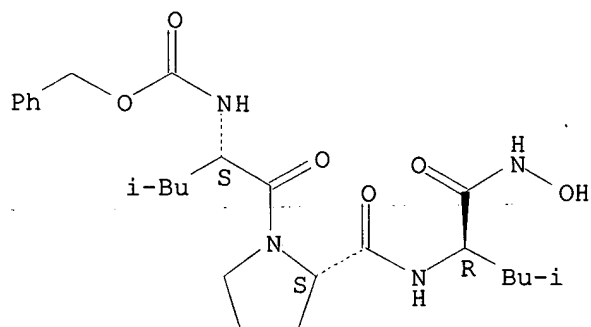
Absolute stereochemistry.



RN 184775-35-7 HCAPLUS

CN D-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-leucyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



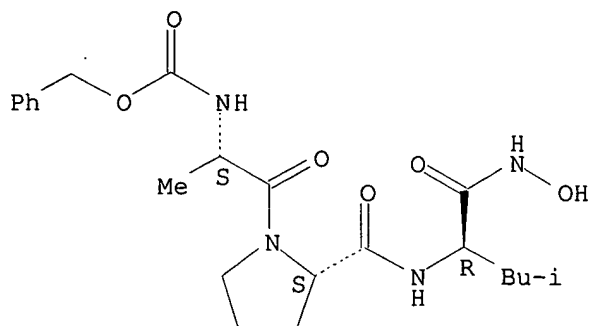
RN 184775-36-8 HCAPLUS

CN D-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-alanyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

Searched by John Dantzman

308-4488

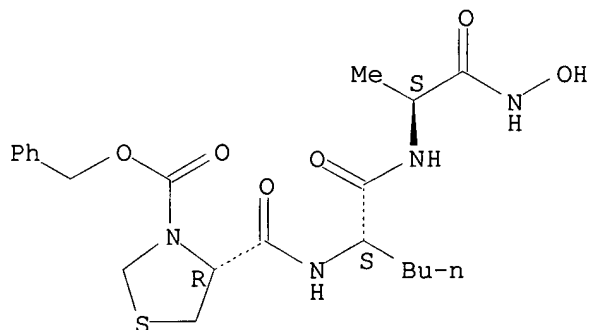
Absolute stereochemistry.



RN 184775-37-9 HCAPLUS

CN L-Alaninamide, (4R)-3-[(phenylmethoxy)carbonyl]-4-thiazolidinecarbonyl-L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

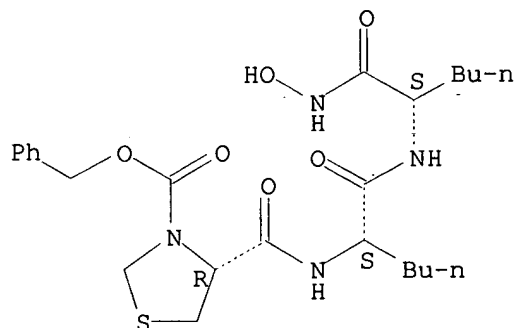
Absolute stereochemistry.



RN 184775-38-0 HCAPLUS

CN L-Norleucinamide,  
(4R)-3-[(phenylmethoxy)carbonyl]-4-thiazolidinecarbonyl-L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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McCarthy

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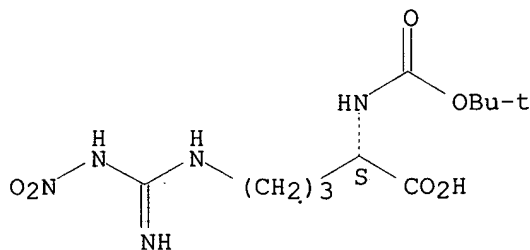
Searched by John Dantzman

308-4488

=> d bib abs hitstr 22

L23 ANSWER 22 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1996:644093 HCAPLUS  
DN 125:329314  
TI Photoacoustic FTIR Spectroscopy, a Nondestructive Method for Sensitive Analysis of Solid-Phase Organic Chemistry  
AU Gosselin, Francis; Di Renzo, Mauro; Ellis, Thomas H.; Lubell, William D.  
CS Departement de chimie, Universite de Montreal, Montreal, PQ, H3C 3J7, Can.  
SO J. Org. Chem. (1996), 61(23), 7980-7981  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English  
AB Photoacoustic Fourier-transform IR spectroscopy (PA-FTIR) is superior to conventional FTIR spectroscopy for monitoring chem. reactions in the solid phase. By detecting only the absorption component of the IR beam, PA-FTIR spectroscopy eludes the effects of light scattering and reflection that complicate conventional FTIR methods. Because no sample prepn. is required, PA-FTIR spectroscopy was used to examine a sequence of reactions on the same **resin** sample without product loss. In particular, useful PA-FTIR spectra were recorded before and after each of the four steps to convert resino-(2S)-S-benzyl-N-(BOC)cysteinate into resino-N-(p-cyanobenzoyl)dehydroalanine using the same 10 mg sample of **resin**. Photoacoustic FTIR spectroscopy should thus find general use as a convenient, non-destructive method for sensitive anal. of solid-phase org. chem.  
IT 2188-18-3DP, **resin**-bound  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (photoacoustic FTIR spectroscopy for monitoring of **solid-phase synthesis** of (cyanobenzoyl)dehydroalanine)  
RN 2188-18-3 HCAPLUS  
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



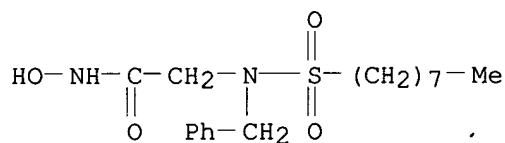
182297-58-1P 182297-59-2P 182297-60-5P  
 182297-61-6P 182297-62-7P 182297-63-8P  
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 182297-67-2P 182297-68-3P 182297-69-4P  
 182297-70-7P 182297-71-8P 182297-72-9P  
 182297-73-0P 182297-74-1P 182297-75-2P  
 182297-76-3P 182297-77-4P 182297-78-5P  
 182297-79-6P 182297-80-9P 182297-81-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(matrix metalloproteinase inhibitor; synthesis of hydroxamic acid derivs. using **solid supports** functionalized with (protected) hydroxylamine)

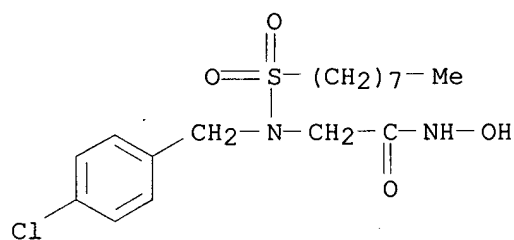
RN 174857-80-8 HCAPLUS

CN Acetamide, N-hydroxy-2-[(octylsulfonyl)(phenylmethyl)amino]- (9CI) (CA INDEX NAME)



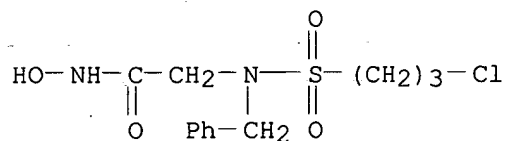
RN 174857-88-6 HCAPLUS

CN Acetamide, 2-[[ (4-chlorophenyl)methyl] (octylsulfonyl) amino]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 182297-48-9 HCAPLUS

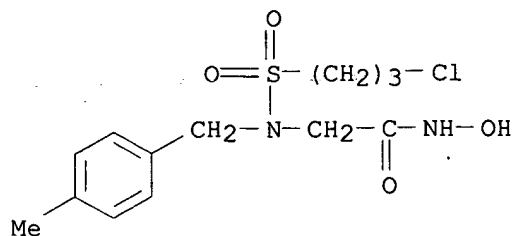
CN Acetamide, 2-[[ (3-chloropropyl)sulfonyl] (phenylmethyl) amino]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 182297-49-0 HCAPLUS

CN Acetamide, 2-[[ (3-chloropropyl)sulfonyl] [(4-methylphenyl)methyl] amino]-N-hydroxy- (9CI) (CA INDEX NAME)

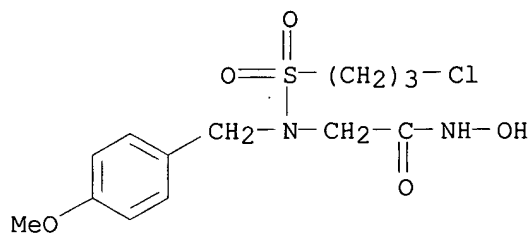




RN 182297-50-3 HCAPLUS

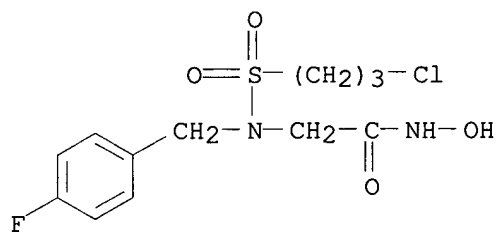
CN Acetamide,

2-[[ (3-chloropropyl)sulfonyl] [(4-methoxyphenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



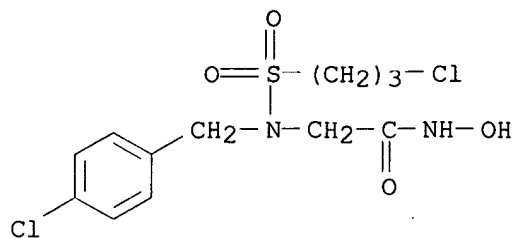
RN 182297-51-4 HCAPLUS

CN Acetamide, 2-[[ (3-chloropropyl)sulfonyl] [(4-fluorophenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



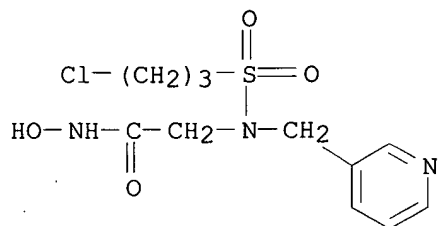
RN 182297-52-5 HCAPLUS

CN Acetamide, 2-[[ (4-chlorophenyl)methyl] [(3-chloropropyl)sulfonyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



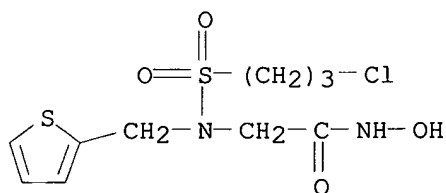
RN 182297-53-6 HCAPLUS

CN Acetamide, 2-[[ (3-chloropropyl)sulfonyl] (3-pyridinylmethyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)



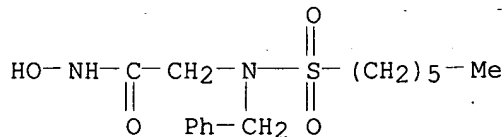
RN 182297-54-7 HCAPLUS

CN Acetamide, 2-[[ (3-chloropropyl)sulfonyl] (2-thienylmethyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 182297-55-8 HCAPLUS

CN Acetamide, 2-[(hexylsulfonyl) (phenylmethyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)

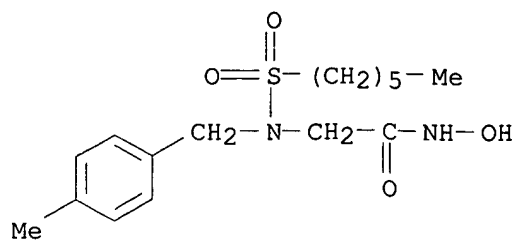


RN 182297-56-9 HCAPLUS

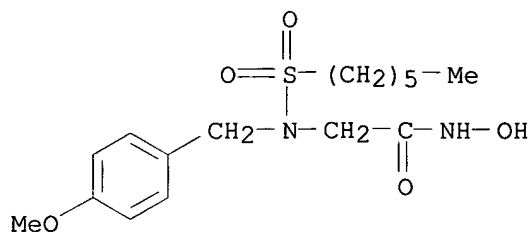
CN Acetamide, 2-[(hexylsulfonyl) [(4-methylphenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)

Searched by John Dantzman

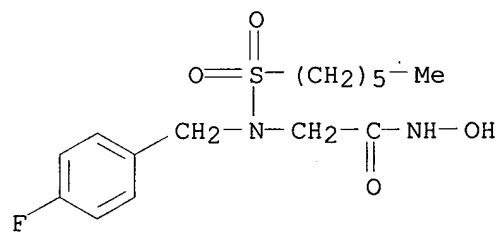
308-4488



RN 182297-57-0 HCAPLUS

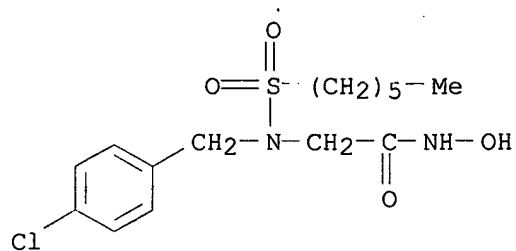
CN Acetamide, 2-[(hexylsulfonyl)[(4-methoxyphenyl)methyl]amino]-N-hydroxy-  
(9CI) (CA INDEX NAME)

RN 182297-58-1 HCAPLUS

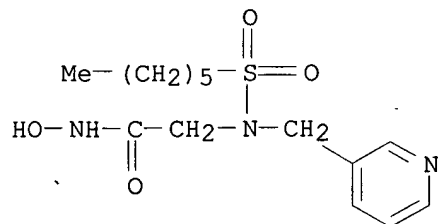
CN Acetamide, 2-[[4-(4-fluorophenyl)methyl](hexylsulfonyl)amino]-N-hydroxy-  
(9CI) (CA INDEX NAME)

RN 182297-59-2 HCAPLUS

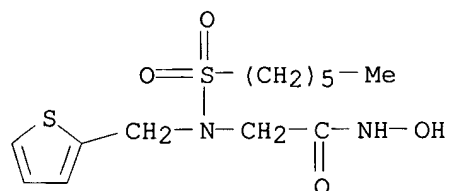
CN Acetamide, 2-[[4-(4-chlorophenyl)methyl](hexylsulfonyl)amino]-N-hydroxy-  
(9CI) (CA INDEX NAME)



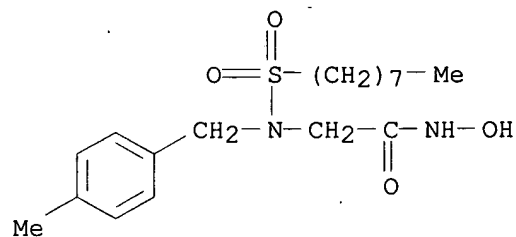
RN 182297-60-5 HCAPLUS

CN Acetamide, 2-[(hexylsulfonyl)(3-pyridinylmethyl)amino]-N-hydroxy- (9CI)  
(CA INDEX NAME)

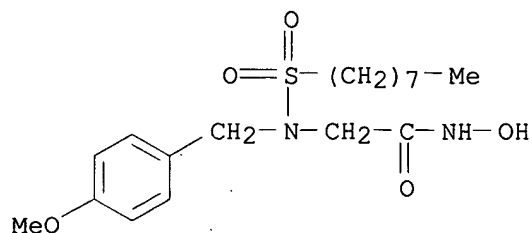
RN 182297-61-6 HCAPLUS

CN Acetamide, 2-[(hexylsulfonyl)(2-thienylmethyl)amino]-N-hydroxy- (9CI)  
(CA INDEX NAME)

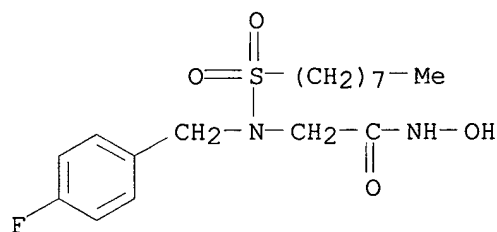
RN 182297-62-7 HCAPLUS

CN Acetamide, N-hydroxy-2-[[ (4-methylphenyl)methyl] (octylsulfonyl)amino]-  
(9CI) (CA INDEX NAME)

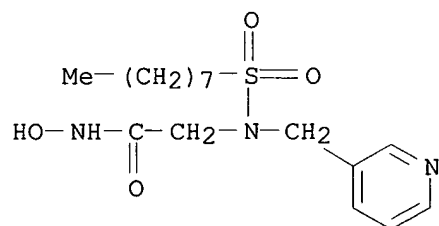
RN 182297-63-8 HCAPLUS  
CN Acetamide, N-hydroxy-2-[[ (4-methoxyphenyl)methyl] (octylsulfonyl)amino]-  
(9CI) (CA INDEX NAME)



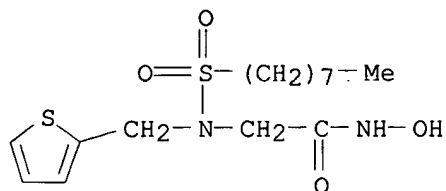
RN 182297-64-9 HCAPLUS  
CN Acetamide, 2-[[ (4-fluorophenyl)methyl] (octylsulfonyl)amino]-N-hydroxy-  
(9CI) (CA INDEX NAME)



RN 182297-65-0 HCAPLUS  
CN Acetamide, N-hydroxy-2-[(octylsulfonyl) (3-pyridinylmethyl)amino]- (9CI)  
(CA INDEX NAME)

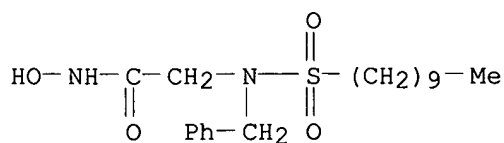


RN 182297-66-1 HCAPLUS  
CN Acetamide, N-hydroxy-2-[(octylsulfonyl) (2-thienylmethyl)amino]- (9CI)  
(CA INDEX NAME)



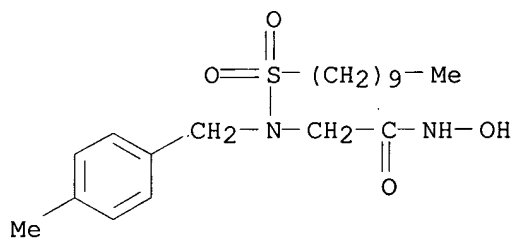
RN 182297-67-2 HCAPLUS

CN Acetamide, 2-[(decylsulfonyl)(phenylmethyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)



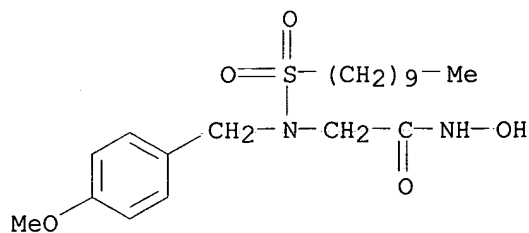
RN 182297-68-3 HCAPLUS

CN Acetamide, 2-[(decylsulfonyl)(4-methylphenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



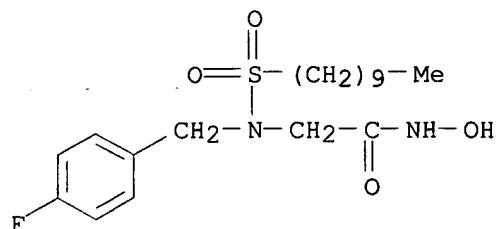
RN 182297-69-4 HCAPLUS

CN Acetamide, 2-[(decylsulfonyl)(4-methoxyphenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



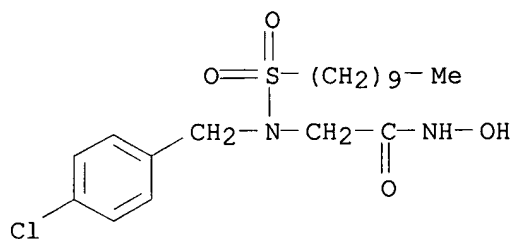
RN 182297-70-7 HCAPLUS

CN Acetamide, 2-[(decylsulfonyl)(4-fluorophenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



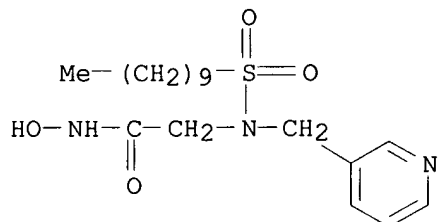
RN 182297-71-8 HCAPLUS

CN Acetamide, 2-[[ (4-chlorophenyl)methyl] (decylsulfonyl) amino]-N-hydroxy- (9CI) (CA INDEX NAME)



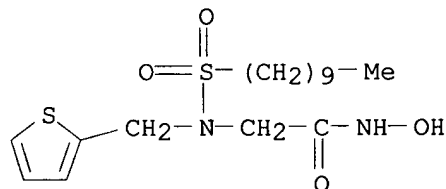
RN 182297-72-9 HCAPLUS

CN Acetamide, 2-[(decylsulfonyl) (3-pyridinylmethyl) amino]-N-hydroxy- (9CI) (CA INDEX NAME)



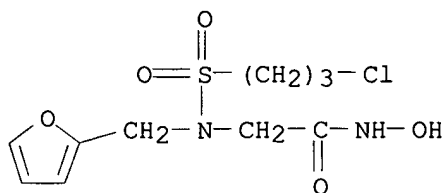
RN 182297-73-0 HCAPLUS

CN Acetamide, 2-[(decylsulfonyl) (2-thienylmethyl) amino]-N-hydroxy- (9CI) (CA INDEX NAME)



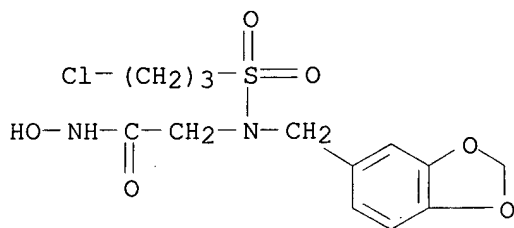
RN 182297-74-1 HCAPLUS

CN Acetamide,

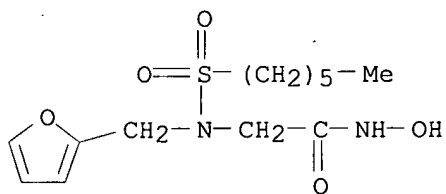
2-[[ (3-chloropropyl)sulfonyl] (2-furanylmethyl)amino]-N-hydroxy-  
(9CI) (CA INDEX NAME)

RN 182297-75-2 HCAPLUS

CN Acetamide,

2-[(1,3-benzodioxol-5-ylmethyl) [(3-chloropropyl)sulfonyl]amino]-  
N-hydroxy- (9CI) (CA INDEX NAME)

RN 182297-76-3 HCAPLUS

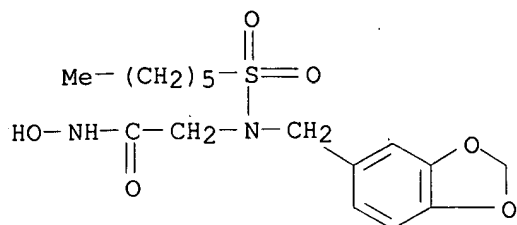
CN Acetamide, 2-[(2-furanylmethyl) (hexylsulfonyl)amino]-N-hydroxy- (9CI)  
(CA INDEX NAME)

RN 182297-77-4 HCAPLUS

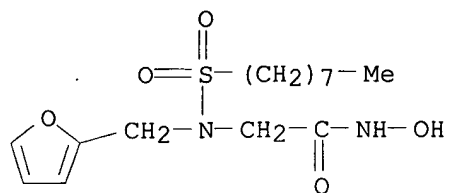
CN Acetamide,

2-[(1,3-benzodioxol-5-ylmethyl) (hexylsulfonyl)amino]-N-hydroxy-  
(9CI) (CA INDEX NAME)

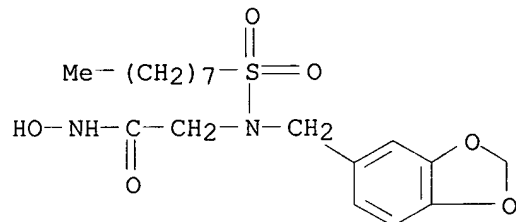




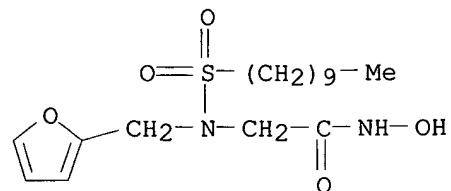
RN 182297-78-5 HCAPLUS  
CN Acetamide, 2-[(2-furanylmethyl)(octylsulfonyl)amino]-N-hydroxy- (9CI)  
(CA INDEX NAME)



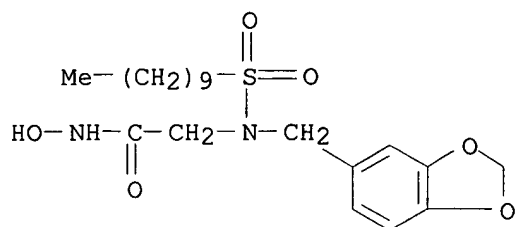
RN 182297-79-6 HCAPLUS  
CN Acetamide,  
2-[(1,3-benzodioxol-5-ylmethyl)(octylsulfonyl)amino]-N-hydroxy-  
(9CI) (CA INDEX NAME)



RN 182297-80-9 HCAPLUS  
CN Acetamide, 2-[(decylsulfonyl)(2-furanylmethyl)amino]-N-hydroxy- (9CI)  
(CA INDEX NAME)

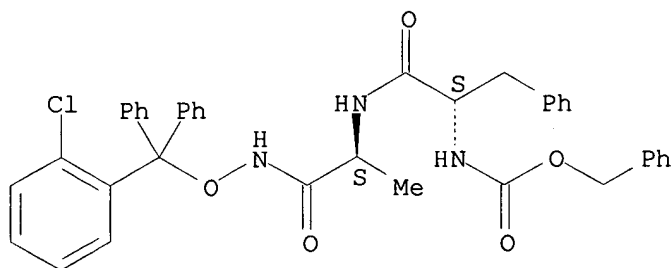


RN 182297-81-0 HCAPLUS  
 CN Acetamide,  
 2-[(1,3-benzodioxol-5-ylmethyl)(decylsulfonyl)amino]-N-hydroxy-  
 (9CI) (CA INDEX NAME)

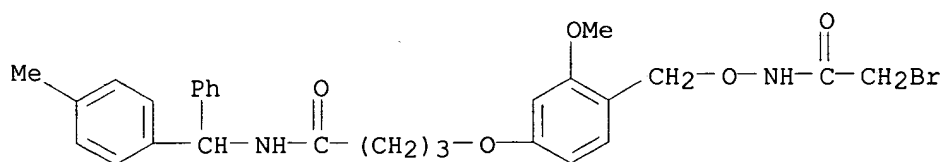


IT 182297-82-1DP, polymer bound 182297-83-2DP, polymer  
 bound 182297-84-3DP, polymer bound 182297-85-4DP,  
 polymer bound  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis of hydroxamic acid derivs. using **solid**  
**supports** functionalized with (protected) hydroxylamine)  
 RN 182297-82-1 HCAPLUS  
 CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-[(2-  
 chlorophenyl)diphenylmethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



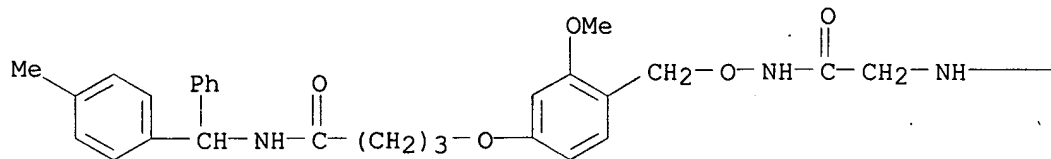
RN 182297-83-2 HCAPLUS  
 CN Butanamide,  
 4-[4-[[[(bromoacetyl)amino]oxy]methyl]-3-methoxyphenoxy]-N-[(4-  
 methylphenyl)phenylmethyl]- (9CI) (CA INDEX NAME)



RN 182297-84-3 HCAPLUS  
 CN Butanamide,  
 4-[3-methoxy-4-[[[(phenylmethyl)amino]acetyl]amino]oxy]methy  
 Searched by John Dantzman 308-4488

1]phenoxy]-N-[(4-methylphenyl)phenylmethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

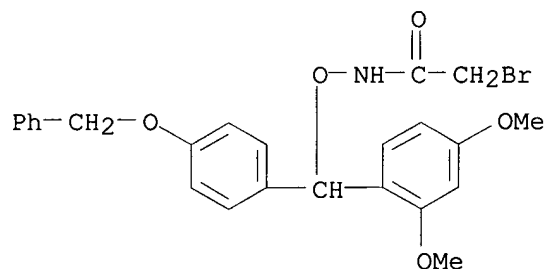


PAGE 1-B

—CH<sub>2</sub>—Ph

RN 182297-85-4 HCAPLUS

CN Acetamide, 2-bromo-N-[(2,4-dimethoxyphenyl)[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA INDEX NAME)



IT 95921-85-0P 123984-00-9P 161314-35-8P  
174777-69-6P

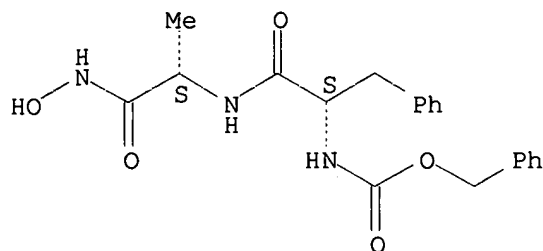
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of hydroxamic acid derivs. using **solid**  
**supports** functionalized with (protected) hydroxylamine)

RN 95921-85-0 HCAPLUS

CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-hydroxy-  
(9CI)

(CA INDEX NAME)

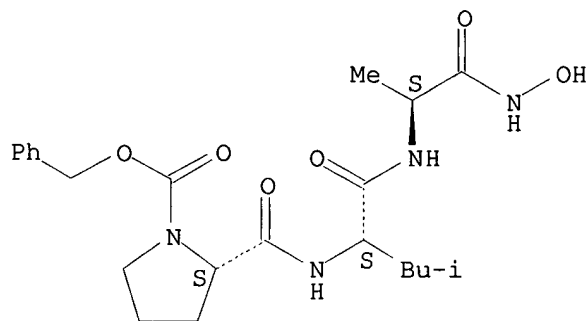
Absolute stereochemistry.



RN 123984-00-9 HCAPLUS

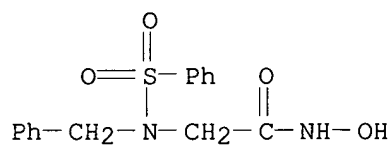
CN L-Alaninamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-leucyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



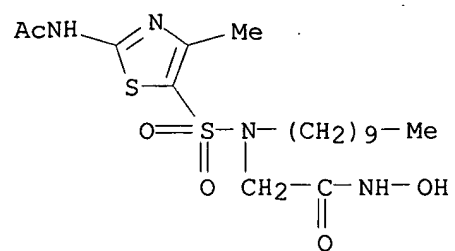
RN 161314-35-8 HCAPLUS

CN Acetamide, N-hydroxy-2-[(phenylmethyl)(phenylsulfonyl)amino]- (9CI) (CA INDEX NAME)



RN 174777-69-6 HCAPLUS

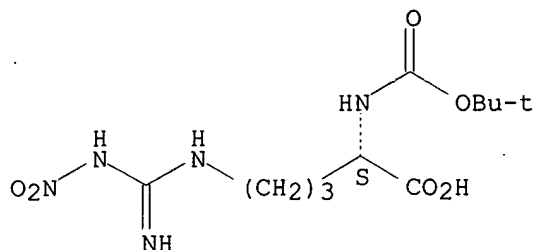
CN Acetamide,  
2-[[[2-(acetylamino)-4-methyl-5-thiazolyl]sulfonyl]decylamino]-  
N-hydroxy- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 24

L23 ANSWER 24 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1996:617221 HCAPLUS  
DN 126:8597  
TI Side reactions in solid-phase peptide synthesis and their applications  
AU Hsieh, Kun-Hwa; Demaine, Margaret M.; Gurusidaiah, S.  
CS Dep. Veterinary Comparative Anatomy, Pharmacol. Physiology, Washington  
State Univ., Pullman, WA, USA  
SO Int. J. Pept. Protein Res. (1996), 48(3), 292-298  
CODEN: IJPPC3; ISSN: 0367-8377  
PB Munksgaard  
DT Journal  
LA English  
AB Side reactions in peptide synthesis indicate steps needing improvement as  
well as opportunities for structural diversification in combinatorial  
design. Among the side reactions obsd. in this study,  
transesterification  
of Boc-Glu(OBzl) occurred in TMAH-catalyzed **resin** attachment,  
leading to Boc-DKKREE(OMe) in solid-phase synthesis of Boc-DKKREE.  
Acetylation of Boc-Arg(NO2)-**resin** occurred during **resin**  
capping with Ac2O/Et3N, leading to GPR(Ac) in GPR synthesis. His- and  
Lys-modification occurred during GHRPLDKKREE cleavage from **resin**  
by Pd(OAc)2-catalyzed hydrogenation in DMF. To verify these side  
reactions, model expts. were performed, which indicated rapid  
transesterification of Boc-Glu(OBzl) in Me, iso-Pr, or tert-Bu alc. into  
the corresponding ester by TMAH, but not by Cs. This TMAH ability was  
used to devise a convenient procedure for peptide cleavage. TLC studies  
of acetylation showed that both Boc-Arg(NO2) and Boc-Arg(Tos) were stable  
to Ac-Im treatment, but were modified by Ac2O/Et3N. Since transfer  
hydrogenation of Boc-His(Bzl) and Boc-Lys(Z) in HCO2H or ammonium formate  
did not generate the formylated side-products of catalytic hydrogenation,  
DMF and not its decompd. product, HCO2H, appears to be involved in  
side-chain modification. Elimination of the side reactions, by using  
Cs-derived Boc-Glu(OBzl)-**resin** for peptide synthesis and  
catalytic hydrogenation in NMP-HOPr for peptide cleavage, increased the  
GHRPLDKKREE yield by 1/3. On the other hand, the side reactions provided  
modified peptides, whose bioassays revealed different importance of the  
modified side-chains.  
IT 2188-18-3 2188-18-3D, **resin**-bound  
RL: RCT (Reactant)  
(side reactions in **solid-phase** peptide  
**synthesis** and their applications)  
RN 2188-18-3 HCAPLUS  
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-  
[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

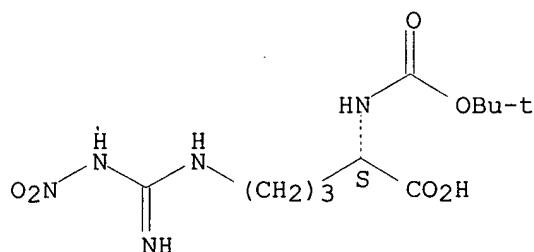
Absolute stereochemistry.



RN 2188-18-3 HCAPLUS

CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 183898-51-3DP, resin-bound 183898-52-4DP,  
resin-bound 183898-52-4P 183898-53-5DP,  
resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(side reactions in **solid-phase** peptide  
**synthesis** and their applications)

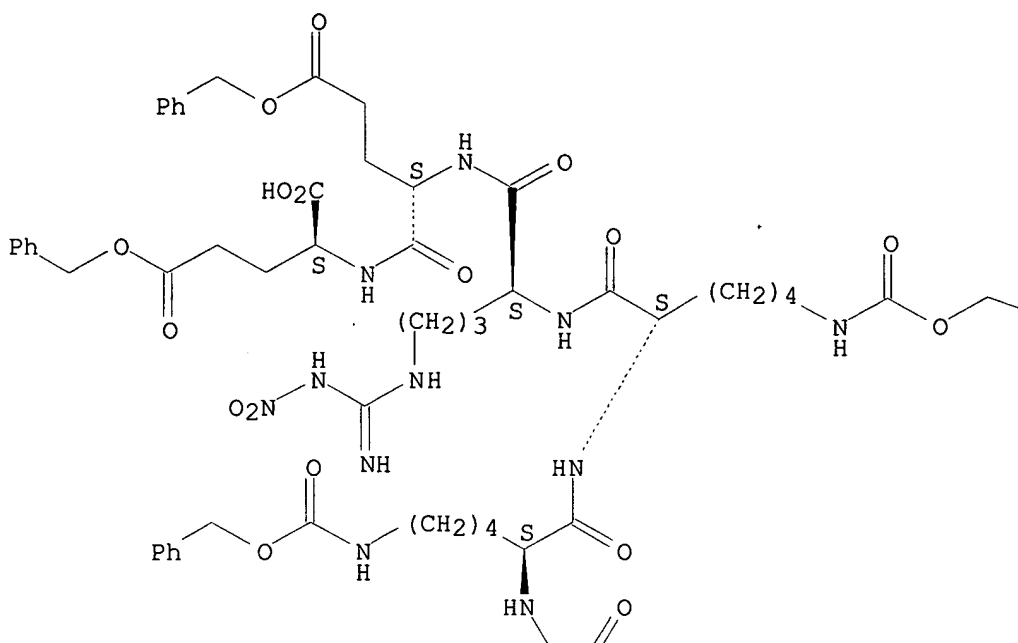
RN 183898-51-3 HCAPLUS

CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-L-.alpha.-aspartyl-N6-

[(phenylmethoxy)carbonyl]-L-lysyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-N5-  
[imino(nitroamino)methyl]-L-ornithyl-L-.alpha.-glutamyl-,  
1,5,65-tris(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

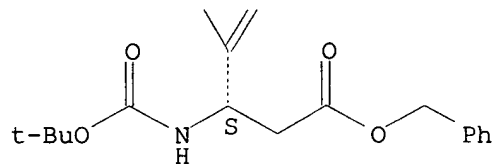
PAGE 1-A



PAGE 1-B

Ph

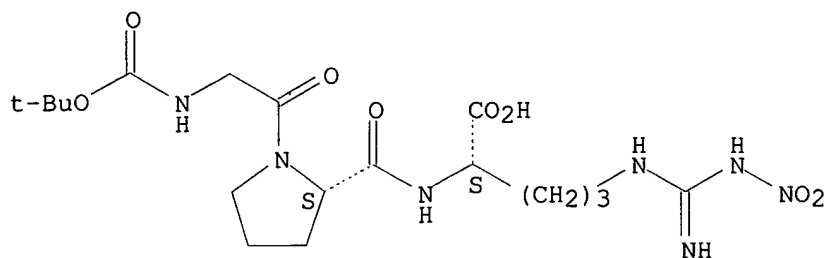
PAGE 2-A





CN L-Ornithine, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-prolyl-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

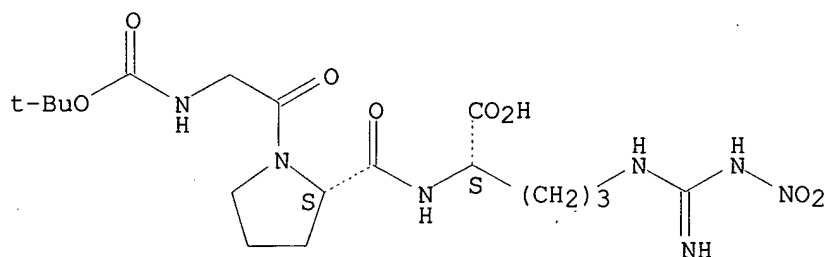
Absolute stereochemistry.



RN 183898-52-4 HCAPLUS

CN L-Ornithine, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-prolyl-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 183898-53-5 HCAPLUS

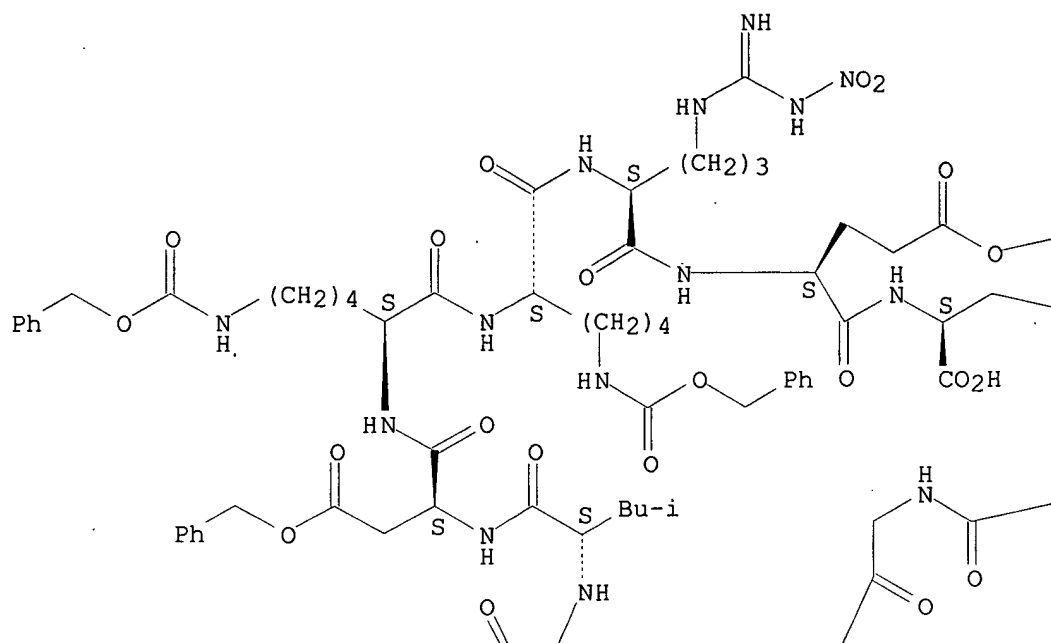
CN L-Glutamic acid,

N-[(1,1-dimethylethoxy)carbonyl]glycyl-1-(phenylmethyl)-L-histidyl-N5-[imino(nitroamino)methyl]-L-ornithyl-L-prolyl-L-leucyl-L-.alpha.-aspartyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-N6-

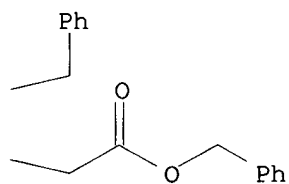
[(phenylmethoxy)carbonyl]-L-lysyl-N5-[imino(nitroamino)methyl]-L-ornithyl-L-.alpha.-glutamyl-, 6,10,115-tris(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

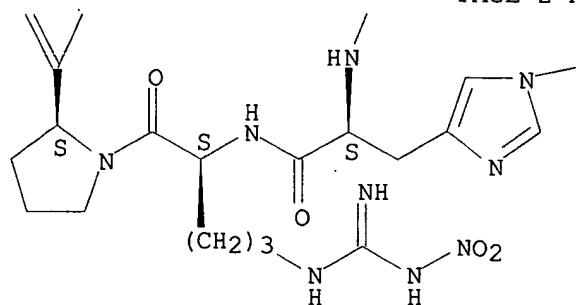


PAGE 1-B

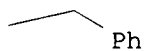


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PAGE 2-A

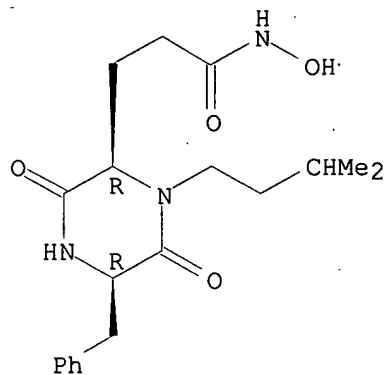


PAGE 2-B



(phenylmethyl)-, (2R-cis)- (9CI) (CA INDEX NAME)

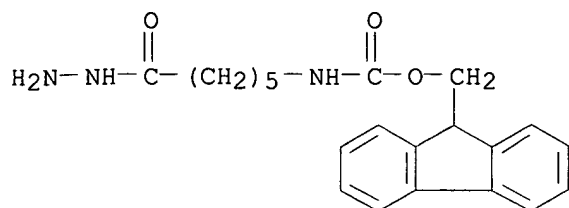
Absolute stereochemistry.



**phase synthesis of peptide hydrazides)**

RN 174800-73-8 HCAPLUS

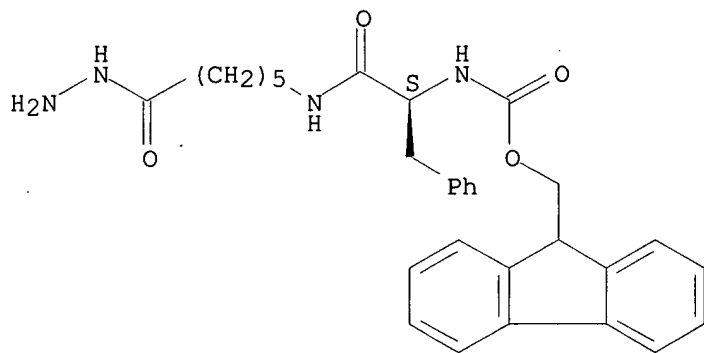
CN Hexanoic acid, 6-[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-, hydrazide (9CI) (CA INDEX NAME)



RN 174800-74-9 HCAPLUS

CN Hexanoic acid, 6-[[2-[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]-, hydrazide, (S)- (9CI) (CA INDEX NAME)

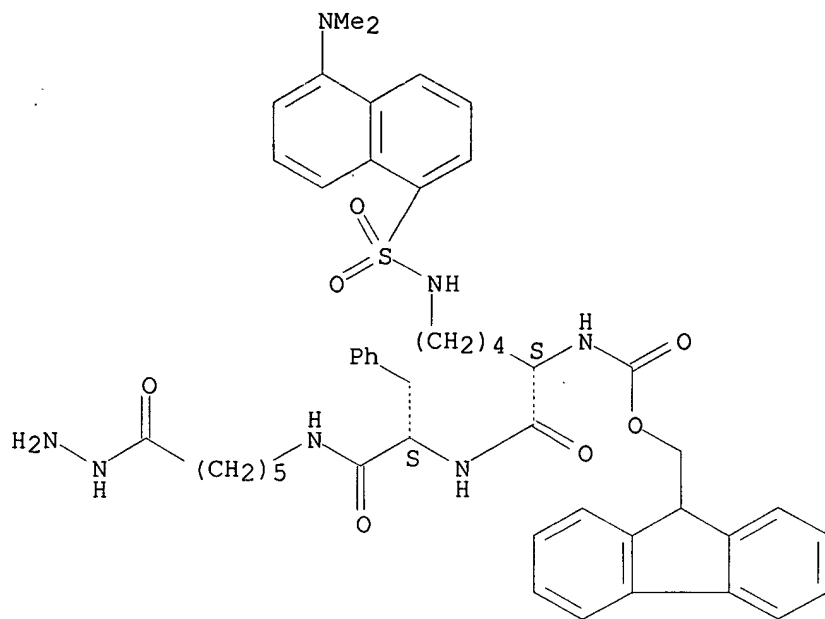
Absolute stereochemistry.



RN 174800-75-0 HCAPLUS

CN L-Phenylalaninamide, N6-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

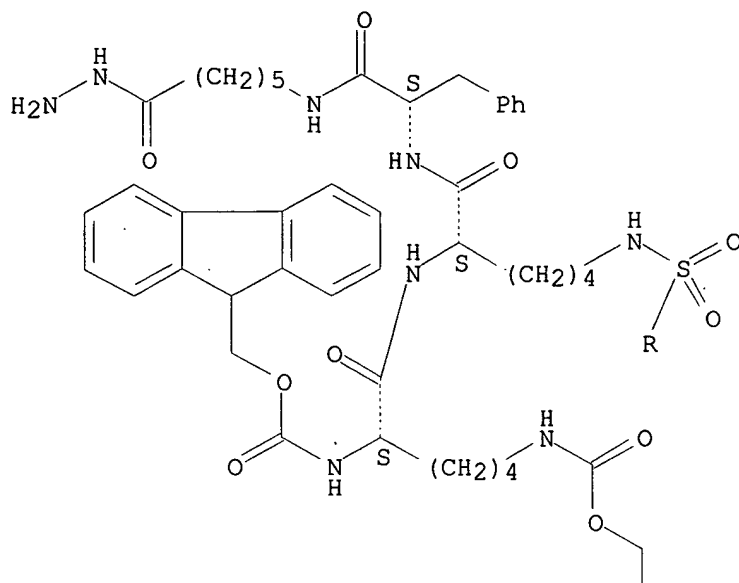


RN 174800-76-1 HCAPLUS

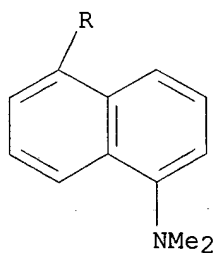
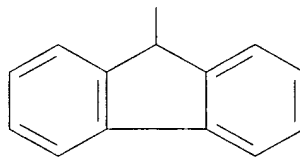
CN L-Phenylalaninamide, N2,N6-bis[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



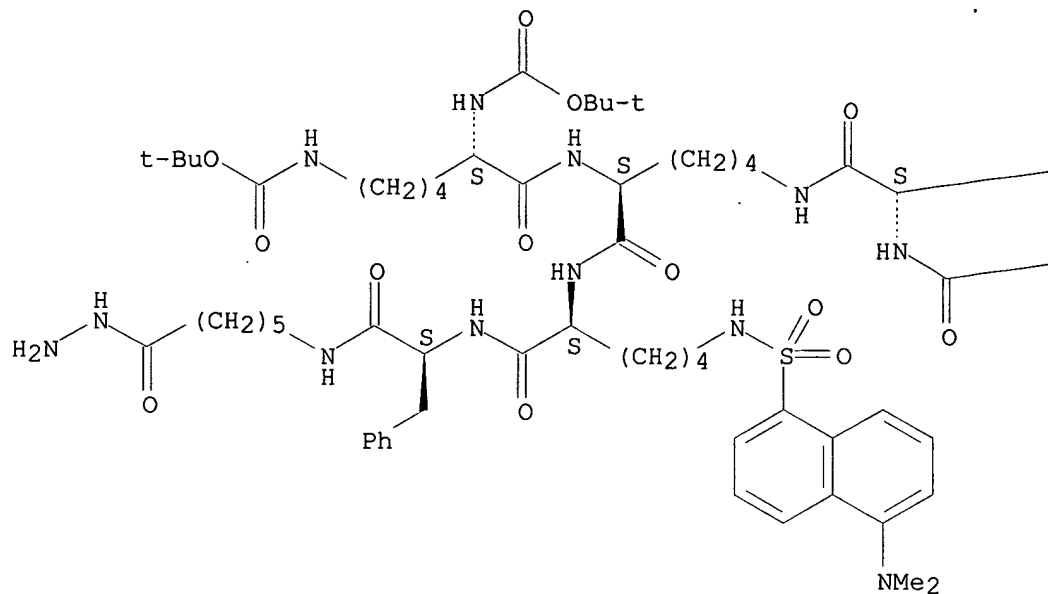
RN 174800-77-2 HCAPLUS  
 CN L-Phenylalaninamide, N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl-N6-[N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl]-L-lysyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)- (9CI) (CA INDEX NAME)

Searched by John Dantzman

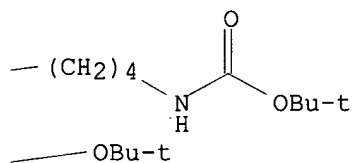
308-4488

Absolute stereochemistry.

PAGE 1-A

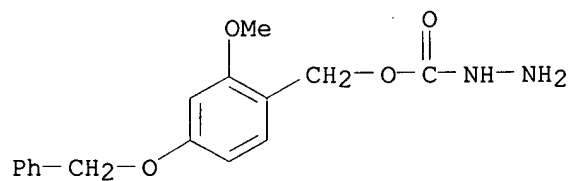


PAGE 1-B



RN 174800-82-9 HCAPLUS

CN Hydrazinecarboxylic acid, [2-methoxy-4-(phenylmethoxy)phenyl]methyl ester (9CI) (CA INDEX NAME)



Searched by John Dantzman

308-4488



IT 174800-77-2P 174800-78-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of resin supports for use in solid

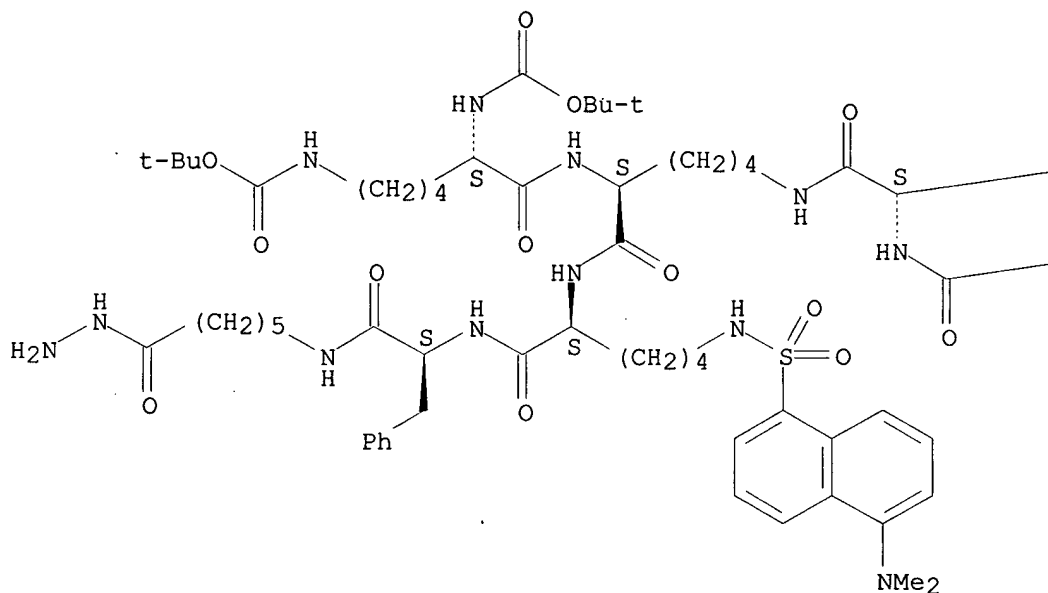
phase synthesis of peptide hydrazides)

RN 174800-77-2 HCAPLUS

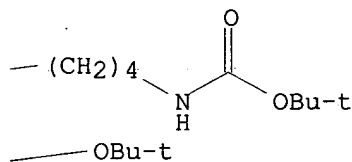
CN L-Phenylalaninamide, N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl-N6-[N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl]-L-lysyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B



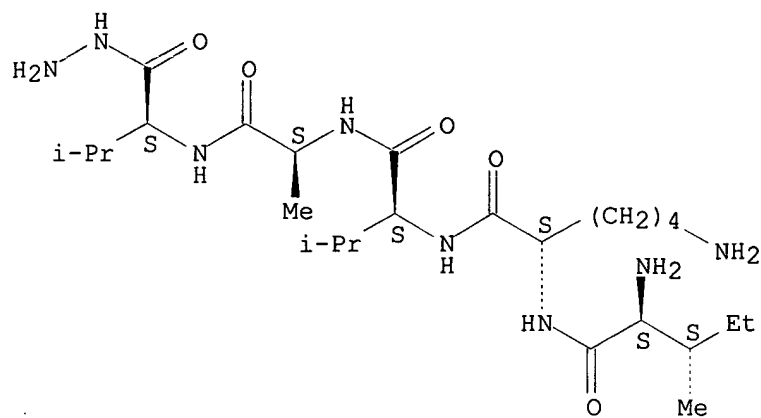
RN 174800-78-3 HCAPLUS

CN L-Valine, N-[N-[N-(N2-L-isoleucyl-L-lysyl)-L-valyl]-L-alanyl]-, hydrazide (9CI) (CA INDEX NAME)

Searched by John Dantzman

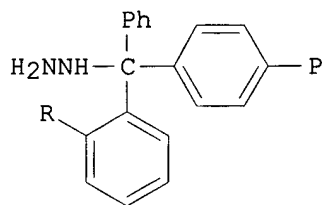
308-4488

Absolute stereochemistry.

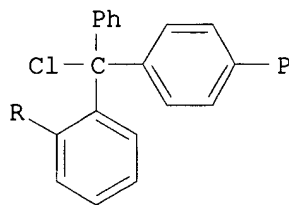


=> d bib abs hitstr 27

L23 ANSWER 27 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1996:86347 HCAPLUS  
DN 124:233130  
TI Preparation of polymer-bound trityl-hydrazines and their application in the solid phase synthesis of partially protected peptide hydrazides  
AU Stravropoulos, George; Gatos, Dimitrios; Magafa, Vassiliki; Barlos, Kleomenis  
CS Dep. Chem., Univ. Patras, Patras, 26500, Greece  
SO Lett. Pept. Sci. (1996), 2(5), 315-18  
CODEN: LPSCEM; ISSN: 0929-5666  
DT Journal  
LA English  
GI



I



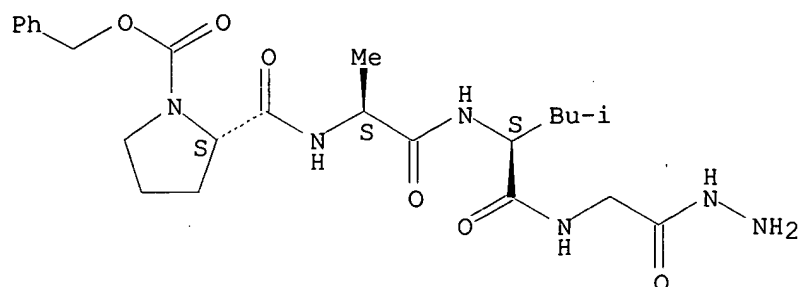
II

AB Polymer-bound N-tritylhydrazines I (R = H, Cl; P = polystyrene polymer support) were easily prepd. by reacting polymeric trityl chlorides II with hydrazine. Subsequently, I were successfully applied to the solid phase synthesis of partially protected peptide hydrazides using 1-hydroxybenzotriazolyl esters of 9-fluorenylmethoxycarbonyl (Fmoc)- or tritylamino acids. The synthesized peptide hydrazides can be quant. split off from the **resins** by mild acidic treatment, while the benzyl and tert-Bu protecting groups remain unaffected.

IT **174872-59-4P 174872-60-7P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of polymer-bound tritylhydrazines and use in **solid phase synthesis** of peptide hydrazides)

RN 174872-59-4 HCAPLUS  
CN Glycine, N-[N-[N-[1-[(phenylmethoxy)carbonyl]-L-prolyl]-L-alanyl]-L-leucyl]-, hydrazide (9CI) (CA INDEX NAME)

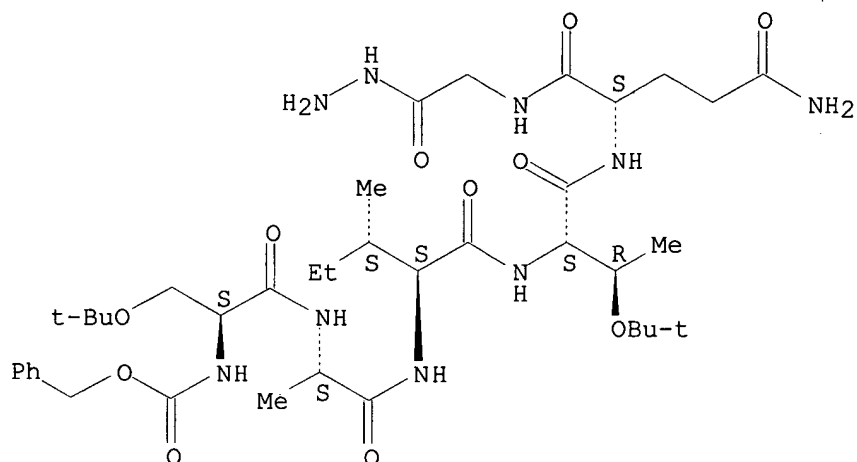
Absolute stereochemistry.



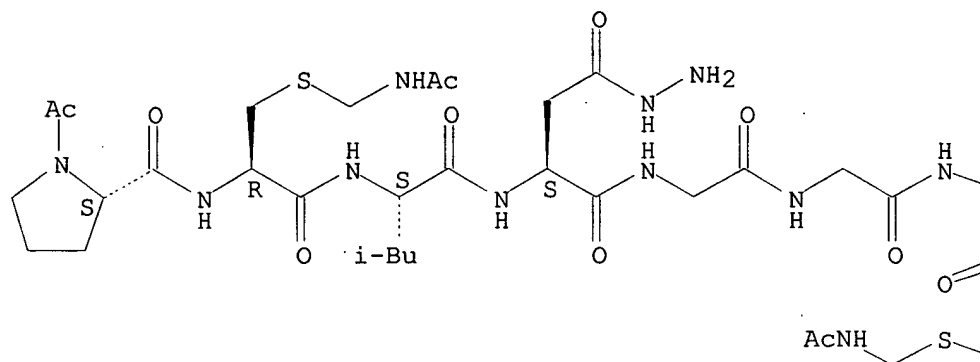
RN 174872-60-7 HCAPLUS

CN Glycine, N-[N2-[O-(1,1-dimethylethyl)-N-[N-[N-[O-(1,1-dimethylethyl)-N-[(phenylmethoxy)carbonyl]-L-seryl]-L-alanyl]-L-isoleucyl]-L-threonyl]-L-glutamyl]-, hydrazide (9CI) (CA INDEX NAME)

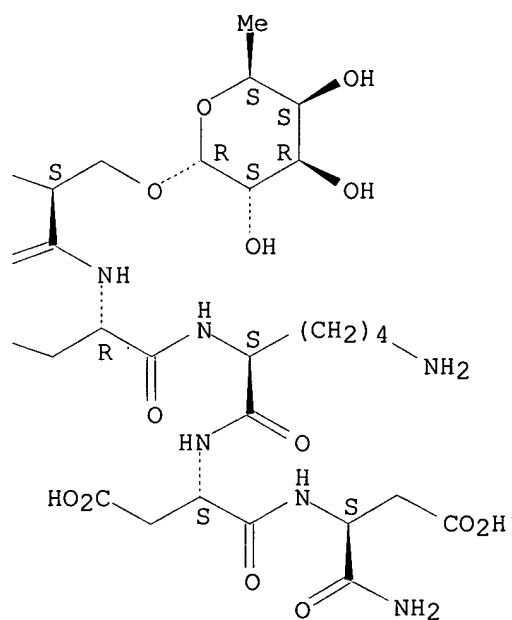
Absolute stereochemistry.



PAGE 1-A

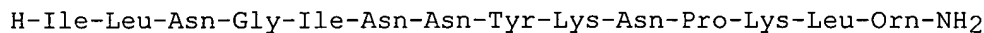
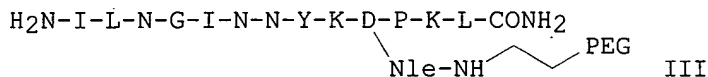
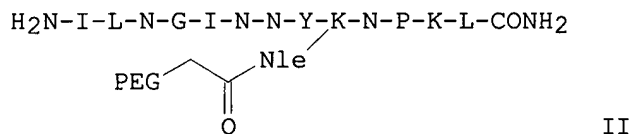
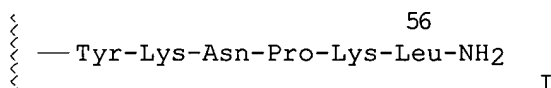
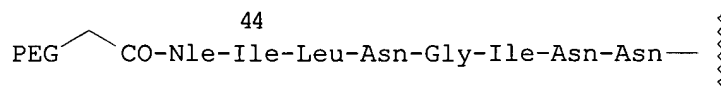


PAGE 1-B

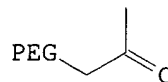


=&gt; d bib abs hitstr 29

L23 ANSWER 29 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1994:656270 HCAPLUS  
 DN 121:256270  
 TI Pegylated peptides. II. Solid-phase synthesis of amino-, carboxy- and side-chain pegylated peptides  
 AU Lu, Yi An; Felix, Arthur M.  
 CS Roche Res. Cent., Hoffmann-La Roch Inc., Nutley, NJ, USA  
 SO Int. J. Pept. Protein Res. (1994), 43(2), 127-38  
 CODEN: IJPPC3; ISSN: 0367-8377  
 DT Journal  
 LA English  
 GI



IV



AB General procedures are presented for the site-specific pegylation of peptides at the NH<sub>2</sub>-terminus, side-chain positions (Lys or Asp/Glu) or COOH-terminus using solid-phase Fmoc/tert-Bu methodologies. A model tridecapeptide fragment of interleukin-2, IL-2(44-56)-NH<sub>2</sub>, was chosen for this study since it possesses several trifunctional amino acids which serve as potential sites for pegylation. The pegylation reagents were designed to contain either Nle or Orn, which served as diagnostic amino acids for confirming the presence of 1 PEG unit per mol of peptide. NH<sub>2</sub>-terminal pegylation was carried out by coupling PEG-CH<sub>2</sub>CO-Nle-OH to the free NH<sub>2</sub>-terminus of the peptide-resin. Side-chain pegylation of Lys or Asp was achieved by one of two pathways. Direct

Searched by John Dantzman 308-4488

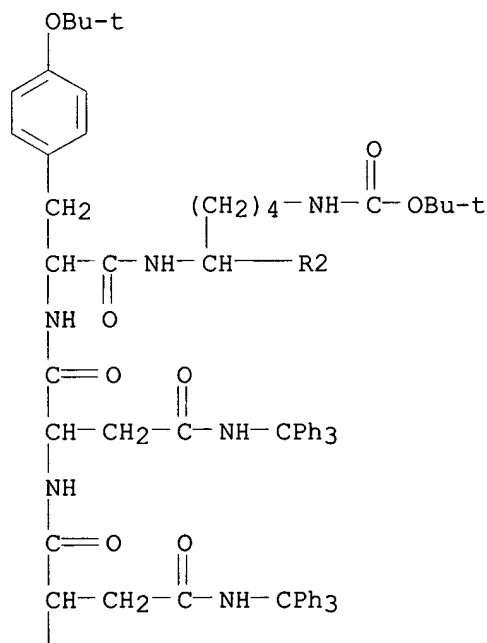
side-chain pegylation was accomplished by coupling with Fmoc-Lys(PEG-CH<sub>2</sub>CO-Nle)-OH or Fmoc-Asp(Nle-NH-CH<sub>2</sub>CH<sub>2</sub>-PEG)-OH, followed by solid-phase assemblage of the pegylated peptide-**resin** and TFA cleavage. Alternatively, allylic protective groups were introduced via Fmoc-Lys(Alloc)-OH or Fmoc-Asp(O-Allyl)-OH, and selectively removed by palladium-catalyzed deprotection after assemblage of the peptide-**resin**. Solid-phase pegylation of the side-chain of Lys or Asp was then carried out in the final stage with PEG-CH<sub>2</sub>CO-Nle-OH or H-Nle-NH-(CH<sub>2</sub>)<sub>2</sub>-PEG, resp. COOH-Terminal pegylation was achieved through the initial attachment of Fmoc-Orn(PEG-CH<sub>2</sub>CO)-OH to the solid support, followed by solid-phase peptide synthesis using the Fmoc/tBu strategy. The pegylated peptides I, II, III, and IV were purified by dialysis and preparative HPLC and were fully characterized by anal. HPLC, amino acid anal., <sup>1</sup>H-NMR spectroscopy and laser desorption mass spectrometry.

IT 158621-98-8DP, amide with [p-(.alpha.-amino-2,4-dimethoxybenzyl)phenoxy]acetamide **resin**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as intermediate in **solid-phase**  
 .**synthesis** of pegylated peptide)

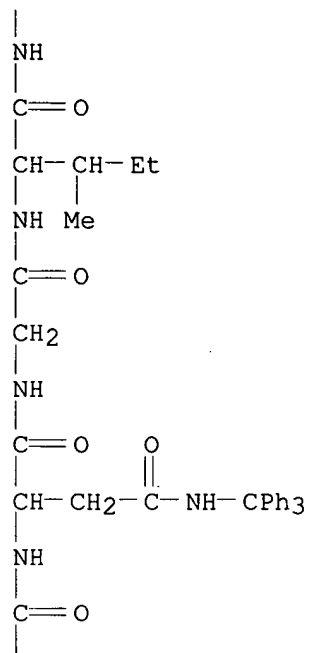
RN 158621-98-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with  
 N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-isoleucyl-L-leucyl-N-  
 (triphenylmethyl)-L-asparaginylglycyl-L-isoleucyl-N-(triphenylmethyl)-L-  
 asparaginyl-N-(triphenylmethyl)-L-asparaginyl-O-(1,1-dimethylethyl)-L-  
 tyrosyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-N-[1-[(2-  
 hydroxyethyl)amino]carbonyl]pentyl]-L-asparaginyl-L-prolyl-N6-[(1,1-  
 dimethylethoxy)carbonyl]-L-lysyl-L-leucine (9CI) (CA INDEX NAME)

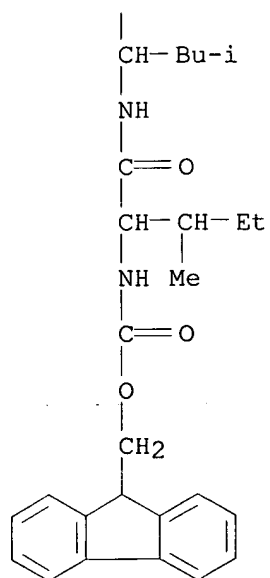
PAGE 1-A



PAGE 2-A

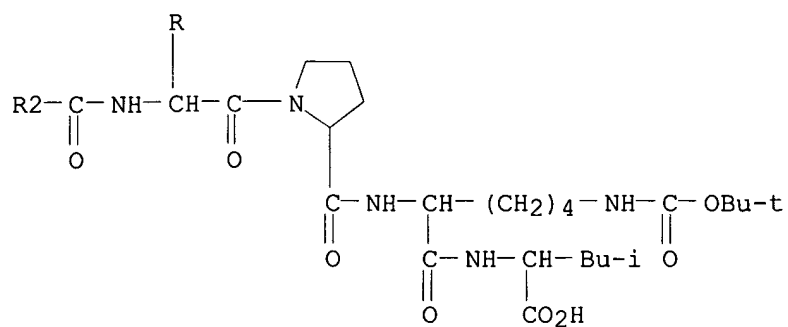
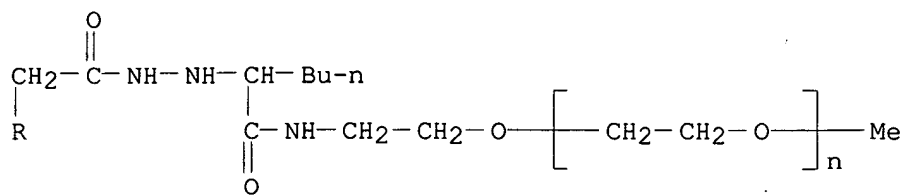


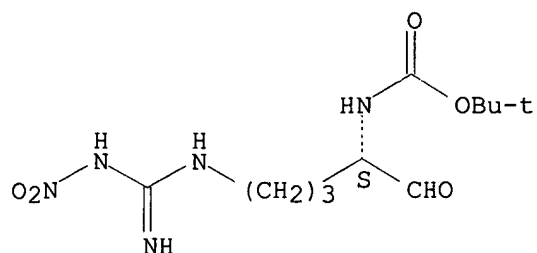
PAGE 3-A





PAGE 4-A



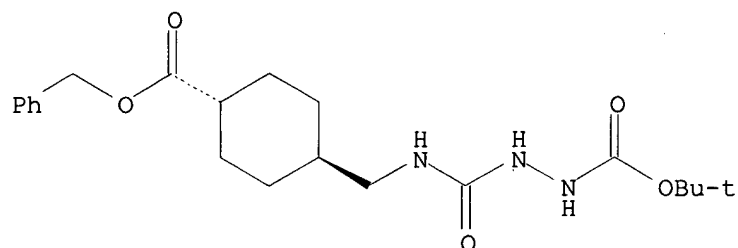


RN 139976-26-4 HCAPLUS

CN Hydrazinecarboxylic acid,

2-[[[trans-4-[(phenylmethoxy)carbonyl]cyclohexyl]methyl]amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

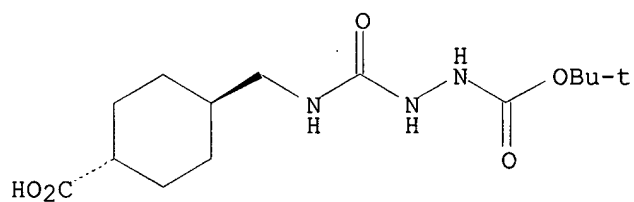


RN 139976-27-5 HCAPLUS

CN Hydrazinecarboxylic acid,

2-[[[trans-4-[(phenylmethoxy)carbonyl]cyclohexyl]methyl]amino]carbonyl]-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

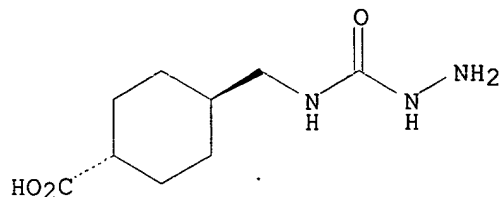
Relative stereochemistry.



RN 139976-28-6 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[[[hydrazinocarbonyl]amino]methyl]-, -trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



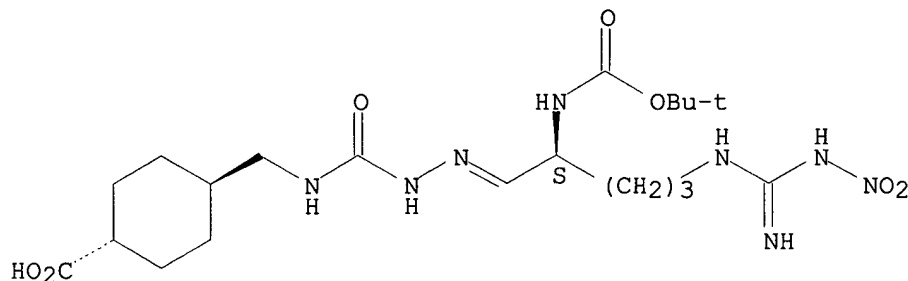
IT 139976-30-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as linker group for **solid phase** peptide  
aldehyde **synthesis**)

RN 139976-30-0 HCAPLUS

CN Cyclohexanecarboxylic acid,  
4-[(7S)-7-[[[imino(nitroamino)methyl]amino]p  
ropyl]-11,11-dimethyl-3,9-dioxo-10-oxa-2,4,5,8-tetraazadodec-5-en-1-yl]-,  
trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



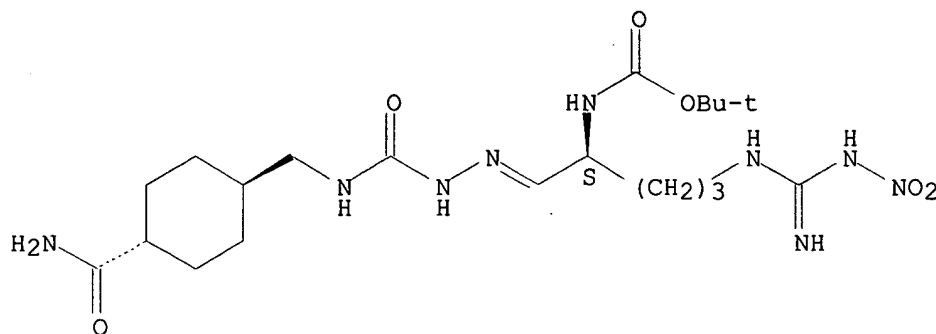
IT 157633-74-4DP, methylbenzhydrylamine **resin-bound**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, for **solid phase synthesis** of  
peptide aldehydes)

RN 157633-74-4 HCAPLUS

CN Carbamic acid,  
[1-[[[[[4-(aminocarbonyl)cyclohexyl]methyl]amino]carbonyl]  
hydrazono]methyl]-4-[[[imino(nitroamino)methyl]amino]butyl]-,  
1,1-dimethylethyl ester, [1(S)-trans]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



IT 870-46-2, tert-Butyl carbazate 2188-18-3,

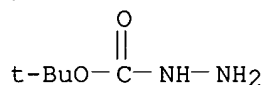
BOC-Arg(NO<sub>2</sub>)-OH

RL: RCT (Reactant)

(reaction of, in prepn. of linker for **solid phase synthesis** of peptide aldehydes)

RN 870-46-2 HCAPLUS

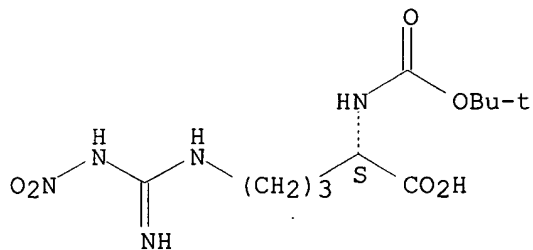
CN Hydrazinecarboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 2188-18-3 HCAPLUS

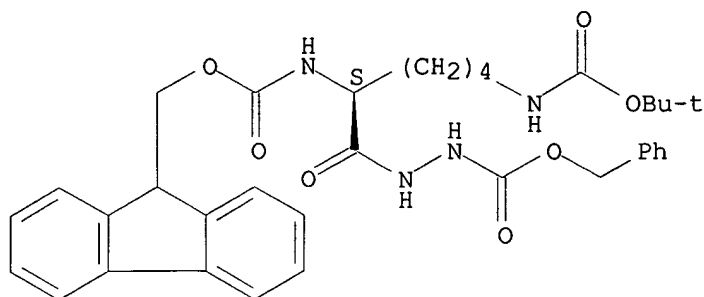
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



[[ (9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxohexyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

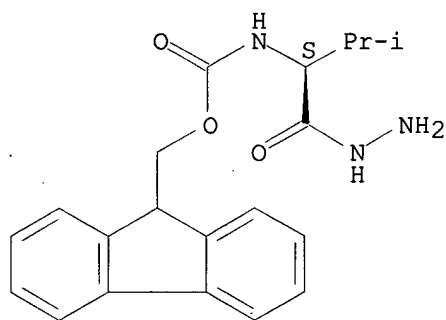
Absolute stereochemistry.



RN 154130-36-6 HCAPLUS

CN L-Valine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, hydrazide (9CI) (CA INDEX NAME)

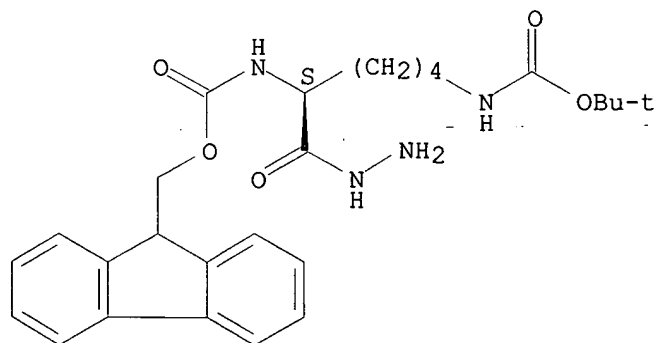
Absolute stereochemistry.



RN 154130-37-7 HCAPLUS

CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



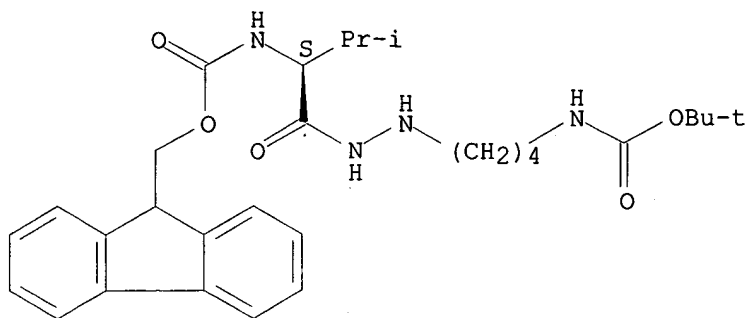
IT 154130-39-9P 154130-41-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as protected azadipeptide building block for **solid-phase peptide synthesis**)

RN 154130-39-9 HCAPLUS

CN 13-Oxa-2,5,6,11-tetraazapentadecanoic acid, 14,14-dimethyl-3-(1-methylethyl)-4,12-dioxo-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

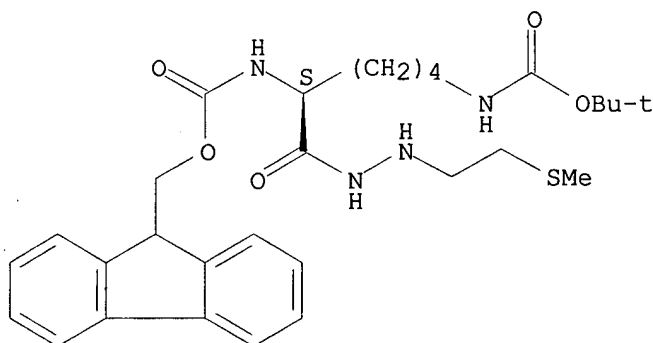
Absolute stereochemistry.



RN 154130-41-3 HCAPLUS

CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-[2-(methylthio)ethyl]hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



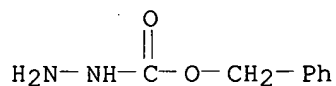
IT 5331-43-1, Benzyl carbazate

RL: RCT (Reactant)

(reactant, in prepn. of protected azadipeptide building blocks for **solid-phase peptide synthesis**)

RN 5331-43-1 HCAPLUS

CN Hydrazinecarboxylic acid, phenylmethyl ester (9CI) (CA INDEX NAME)



Searched by John Dantzman

308-4488

McCarthy

09/122576

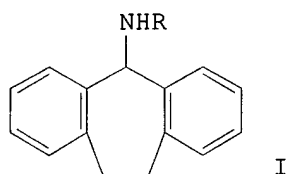
Page 47

Searched by John Dantzman

308-4488

=> d bib abs hitstr 32

L23 ANSWER 32 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1994:218492 HCAPLUS  
DN 120:218492  
TI Design of a versatile linker for solid phase peptide synthesis: synthesis of C-terminal primary/secondary amides and hydrazides  
AU Ramage, R.; Irving, S. L.; McInnes, C.  
CS Dep. Chem., Univ. Edinburgh, Edinburgh, EH9 3JJ, UK  
SO Tetrahedron Lett. (1993), 34(41), 6599-602  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English  
GI



AB An efficient, versatile linker for solid-phase peptide synthesis, based upon the dibenzocyclohepta-1,4-diene system, has been developed for the synthesis of C-terminal primary/secondary amides and hydrazides. Thus, linkers I [R = Fmoc, NHBoc, (CH<sub>2</sub>)<sub>6</sub>Me] were prepd. and used in the solid-phase synthesis of the above peptides.

IT 83345-59-9P

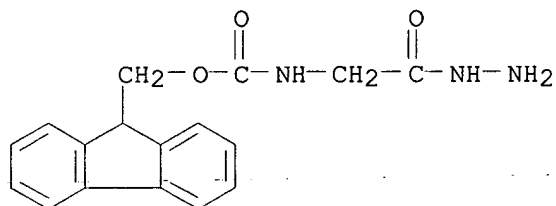
RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, by release from loaded linker-**resin**)

RN 83345-59-9 HCAPLUS

CN Glycine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, hydrazide (9CI) (CA

INDEX

NAME)



IT 153645-46-6DP, polystyrene-bound

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as linker for **solid-phase**

**synthesis** of peptide amides)

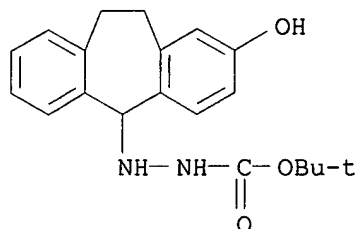
RN 153645-46-6 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(10,11-dihydro-2-hydroxy-5H-

Searched by John Dantzman 308-4488



dibenzo[a,d]cyclohepten-5-yl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



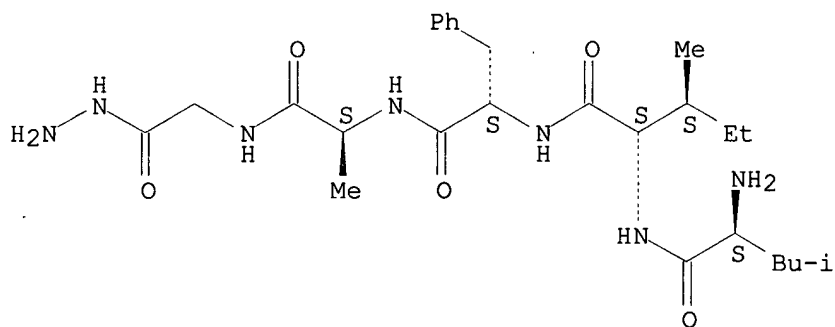
IT 153960-71-5P 153960-72-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, by solid-phase method using versatile  
dibenzocycloheptadiene-based linker)

RN 153960-71-5 HCAPLUS

CN Glycine, N-[N-[N-(N-L-leucyl-L-isoleucyl)-L-phenylalanyl]-L-alanyl]-, hydrazide (9CI) (CA INDEX NAME)

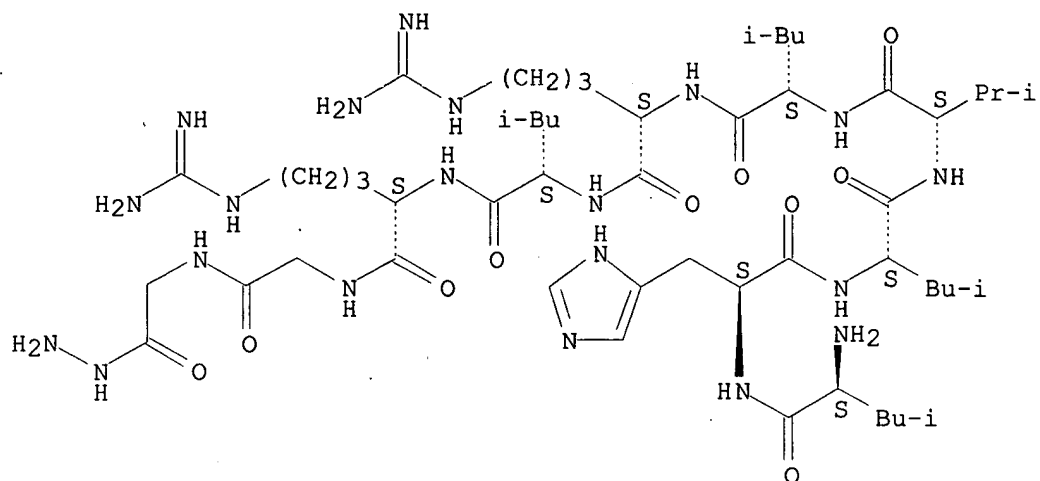
Absolute stereochemistry.



RN 153960-72-6 HCAPLUS

CN Glycine, N-[N-[N2-[N-[N2-[N-[N-[N-(N-L-leucyl-L-histidyl)-L-leucyl]-L-valyl]-L-leucyl]-L-arginyl]-L-leucyl]-L-arginyl]glycyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



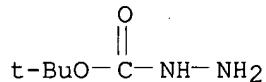
IT 870-46-2

RL: RCT (Reactant)

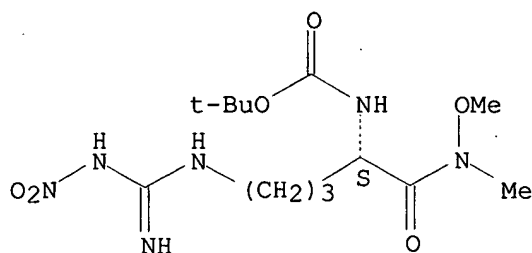
(reactant, in prepn. of versatile dibenzocycloheptadiene-based linker for **solid-phase** peptide **synthesis**)

RN 870-46-2 HCAPLUS

CN Hydrazinecarboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



Absolute stereochemistry.



IT 139976-26-4P 139976-27-5P 139976-29-7P  
139976-30-0P

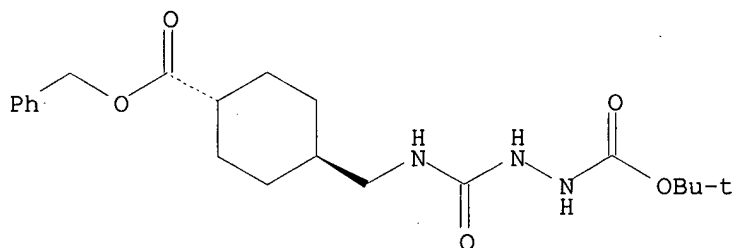
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for semicarbazone/semicarbazide amino acid  
aldehyde support for automated synthesis of peptide analogs)

RN 139976-26-4 HCAPLUS

CN Hydrazinecarboxylic acid,

2-[[[(trans-4-[(phenylmethoxy)carbonyl]cyclohexyl)methyl]amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

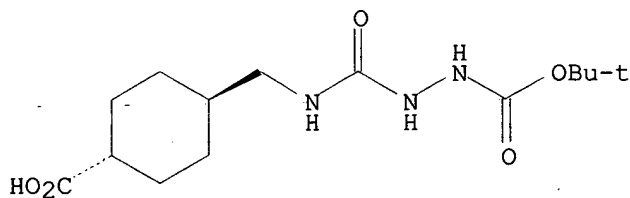


RN 139976-27-5 HCAPLUS

CN Hydrazinecarboxylic acid,

2-[[[(trans-4-carboxycyclohexyl)methyl]amino]carbonyl]-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 139976-29-7 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[[[(hydrazinocarbonyl)amino]methyl]-, trans-,

mono(trifluoroacetate) (9CI) (CA INDEX NAME)

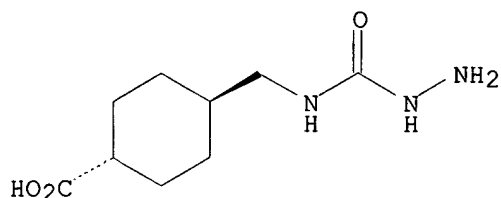
Searched by John Dantzman

308-4488

CM 1

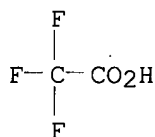
CRN 139976-28-6  
CMF C9 H17 N3 O3  
CDES 2:TRANS

Relative stereochemistry.



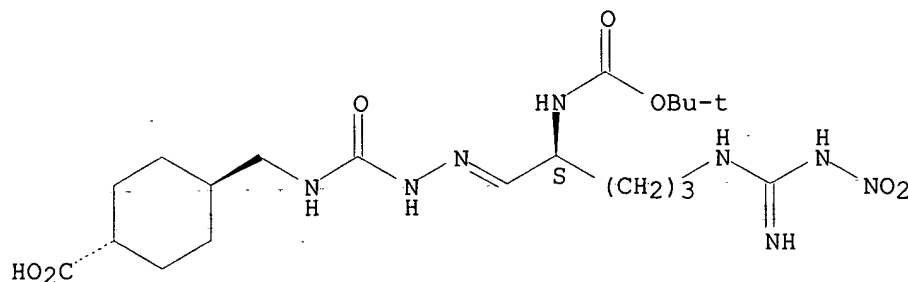
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 139976-30-0 HCAPLUS  
CN Cyclohexanecarboxylic acid,  
4-[(7S)-7-[3-[[imino(nitroamino)methyl]amino]p  
ropyl]-11,11-dimethyl-3,9-dioxo-10-oxa-2,4,5,8-tetraazadodec-5-en-1-yl]-,  
trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



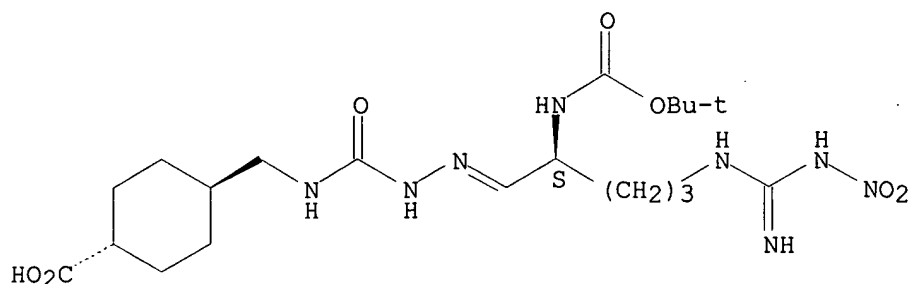
IT 139976-30-0DP, resin bound  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as support for automated synthesis of peptide analogs)  
RN 139976-30-0 HCAPLUS

Searched by John Dantzman

308-4488

CN Cyclohexanecarboxylic acid,  
4-[(7S)-7-[3-[[imino(nitroamino)methyl]amino]p  
ropyl]-11,11-dimethyl-3,9-dioxo-10-oxa-2,4,5,8-tetraazadodec-5-en-1-yl]-,  
trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



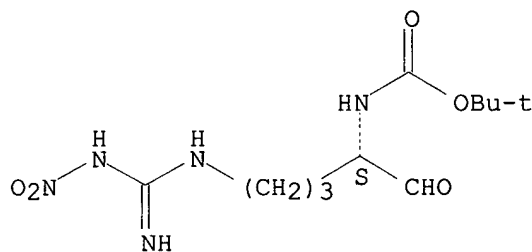
IT 71413-14-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, in **solid phase synthesis** of  
peptide aldehydes)

RN 71413-14-4 HCAPLUS

CN Carbamic acid, [(1S)-1-formyl-4-[[imino(nitroamino)methyl]amino]butyl]-,  
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



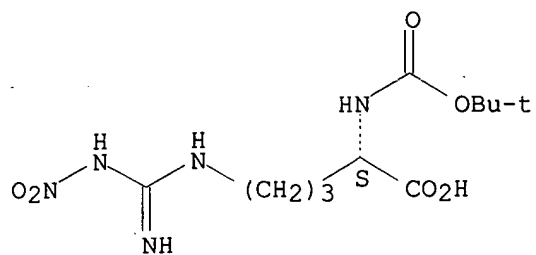
IT 2188-18-3

RL: RCT (Reactant)  
(redn. of, in **solid phase synthesis** of  
peptide aldehydes)

RN 2188-18-3' HCAPLUS

CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-  
[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

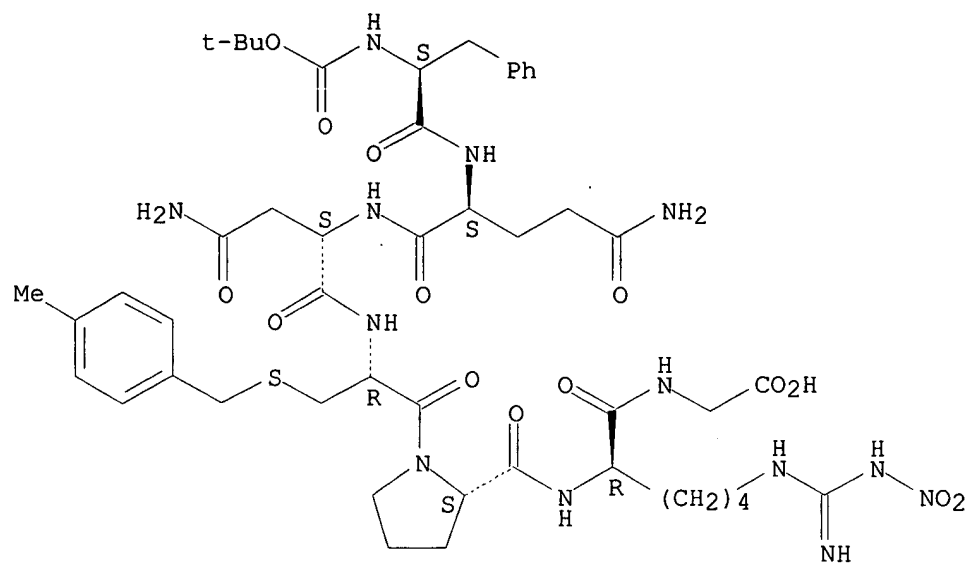
Absolute stereochemistry.



=> d bib abs hitstr 34

L23 ANSWER 34 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1992:531545 HCAPLUS  
DN 117:131545  
TI Amino acids and peptides. CCXXVIII. The analogs of 8-D-homoarginin-  
vasopressin with o-substituted phenylalanine in position 2: synthesis  
and  
some biological properties  
AU Zertova, Miroslava; Prochazka, Zdenko; Slaninova, Jirina; Barth,  
Tomislav;  
Majer, Pavel; Lebl, Michal  
CS Inst. Org. Chem. Biochem., Czech. Acad. Sci., Prague, 166 10, Czech.  
SO Collect. Czech. Chem. Commun. (1992), 57(5), 1103-10  
CODEN: CCCCAK; ISSN: 0010-0765  
DT Journal  
LA English  
OS CASREACT 117:131545  
GI For diagram(s), see printed CA Issue.  
AB Solid-phase methodol. on p-methylbenzhydrylamine **resin** was used  
for the synthesis of four title vasopressin analogs I [Har =  
homoarginine;  
X = L-Phe(o-Me), D-Phe(o-Me), L-Phe(o-Et), D-Phe(o-Et)] with the noncoded  
amino acids D-homoarginine in position 8 and o-substituted L- or  
D-phenylalanine in position 2. All analogs had very low antidiuretic  
activity. Analogs I [X = L-Phe(o-Me), D-Phe(o-Et)] were low pressor  
inhibitors. All analogs were found to be the uterotonic inhibitors, the  
most potent one in vitro being [D-Phe(o-Et)<sub>2</sub>,D-Har<sub>8</sub>]vasopressin with a  
pA<sub>2</sub>  
= 8.4.  
IT **132718-72-0DP**, amide with methylbenzhydrylamine **resin**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and **solid-phase synthesis** of  
vasopressin analogs with)  
RN 132718-72-0 HCAPLUS  
CN Glycine, N-[N<sub>2</sub>-[1-[N-[N<sub>2</sub>-[N<sub>2</sub>-[N-[(1,1-dimethylethoxy)carbonyl]-L-  
phenylalanyl]-L-glutaminy]-L-asparaginy]-S-[(4-methylphenyl)methyl]-L-  
cysteinyl]-L-prolyl]-N<sub>6</sub>-[imino(nitroamino)methyl]-D-lysyl]- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



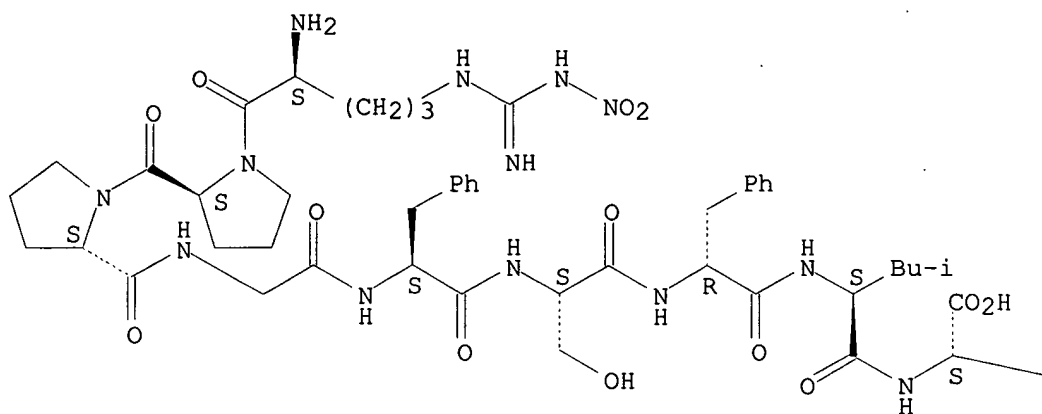


=> d bib abs hitstr 35

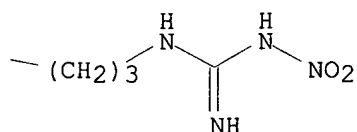
L23 ANSWER 35 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1992:408430 HCAPLUS  
DN 117:8430  
TI Synthesis of bradykinin analogs by new reaction vessel  
AU Choi, Cheong  
CS Coll. Agric. Anim. Sci., Yeungnam Univ., Gyongsan, 712-749, S. Korea  
SO Han'guk Nonghwa Hakhoechi (1991), 34(4), 334-8  
CODEN: JKACA7; ISSN: 0368-2897  
DT Journal  
LA Korean  
AB Synthesis of (D-Phe7,Leu8)-bradykinin and bradykinin by solid-phase  
method  
using a new reaction vessel was carried out. Coupling was performed by  
dicyclohexylcarbodiimide. After cleavage with dried HBr the peptides  
were  
purified by high-pressure liq. chromatog. Their purify was assayed by  
paper and thin layer chromatog., m.p. and amino acid anal.  
(D-Phe7,Leu8)-bradykinin and bradykinin were incubator in vitro  
endopeptidase (.alpha.-chymotrypsin) and exopeptidase(carboxypeptidase A,  
leucine aminopeptidase) in order to study the degrdn. pattern of  
peptides.  
(D-Phe7,Leu8)-bradykinin and bradykinin were rapidly degraded by  
.alpha.-chymotrypsin and carboxypeptidase A. (D-Phe7,Leu8)-bradykinin  
and  
bradykinin contain imino peptide bound from proline at N-terminal and  
therefore they were not attacked by leucine aminopeptidase.  
IT 141873-51-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and hydrogenolysis of)  
RN 141873-51-0 HCAPLUS  
CN Bradykinin,  
1-[N5-[imino(nitroamino)methyl]-L-ornithine]-7-D-phenylalanine-  
8-L-leucine-9-[N5-[imino(nitroamino)methyl]-L-ornithine]- (9CI) (CA  
INDEX  
NAME)

Absolute stereochemistry.

PAGE 1-A

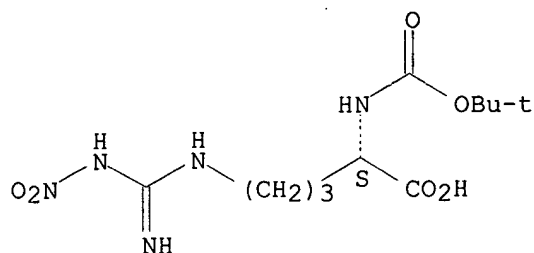


PAGE 1-B



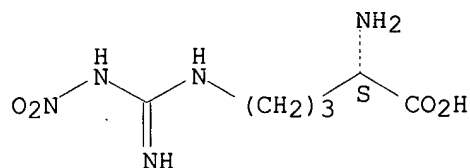
IT 2188-18-3DP, resin-bound  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and partial deblocking of)  
 RN 2188-18-3 HCAPLUS  
 CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-  
 [imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **2149-70-4DP**, NG-Nitro-L-arginine, **resin-bound**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and peptide coupling of, with leucine deriv.)  
 RN 2149-70-4 HCAPLUS  
 CN L-Ornithine, N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

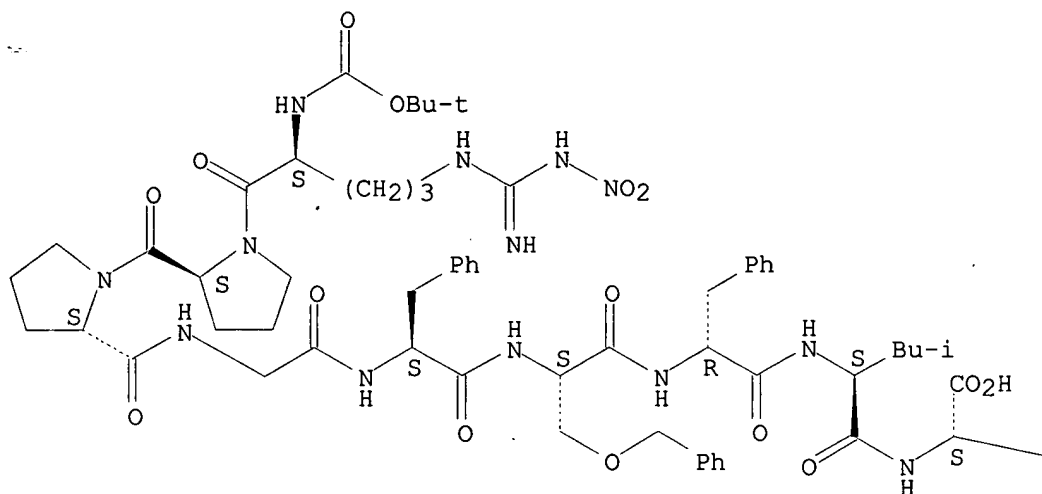
Absolute stereochemistry.



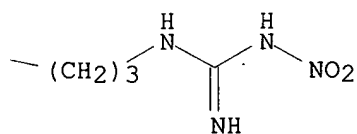
IT **141873-50-9DP**, **resin-bound**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and **resin** cleavage-deblocking of)  
 RN 141873-50-9 HCAPLUS  
 CN L-Ornithine,  
 N2-[N-[N-[N-[N-[N-[1-[1-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-  
 [imino(nitroamino)methyl]-L-ornithyl]-L-prolyl]-L-prolyl]glycyl]-L-  
 phenylalanyl]-O-(phenylmethyl)-L-seryl]-D-phenylalanyl]-L-leucyl]-N5-  
 [imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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IT 87590-39-4DP, resin-bound

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and **solid-phase synthesis** of  
 bradykinin analog with)

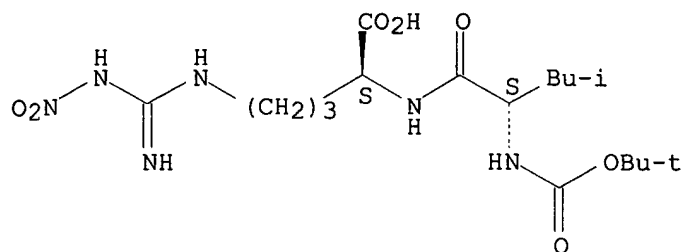
RN 87590-39-4 HCAPLUS

CN L-Ornithine, N2-[N-[(1,1-dimethylethoxy)carbonyl]-L-leucyl]-N5-  
 [imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Searched by John Dantzman

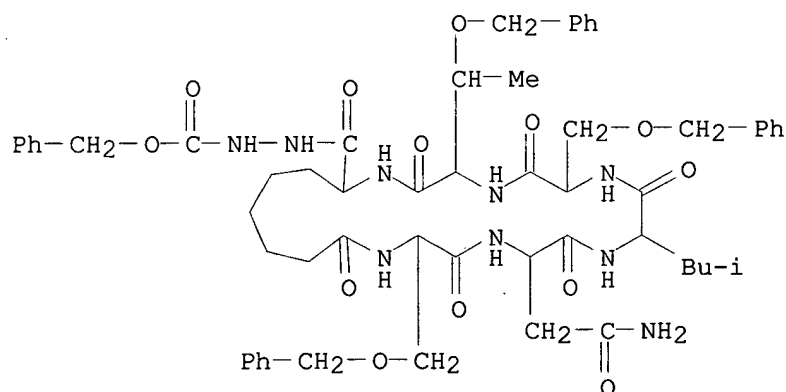
308-4488



=> d bib abs hitstr 36

L23 ANSWER 36 OF 52 HCAPLUS COPYRIGHT 1999 ACS  
AN 1992:194832 HCAPLUS  
DN 116:194832  
TI Facile synthesis of cyclic peptides containing .alpha.-aminosuberic acid  
with oxime **resin**  
AU Nishino, Norikazu; Xu, Ming; Mihara, Hisakazu; Fujimoto, Tsutomu; Ohba,  
Masataka; Ueno, Yukio; Kumagai, Hiromichi  
CS Fac. Eng., Kyushu Inst. Technol., Kitakyushu, 804, Japan  
SO J. Chem. Soc., Chem. Commun. (1992), (2), 180-1  
CODEN: JCCCAT; ISSN: 0022-4936  
DT Journal  
LA English  
GI For diagram(s), see printed CA Issue.  
AB Title cyclic peptides, e.g., I, were prepd. by the solid-phase method  
usuing an oxime **resin**. The protected peptide was cyclized when  
it was cleaved from the oxime **resin** by Et3N/HOAc.  
IT **139903-97-2P 139903-99-4P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and deblocking of)  
RN 139903-97-2 HCAPLUS  
CN L-Threonine,  
N-[7-amino-1,8-dioxo-8-[2-[(phenylmethoxy)carbonyl]hydrazino]

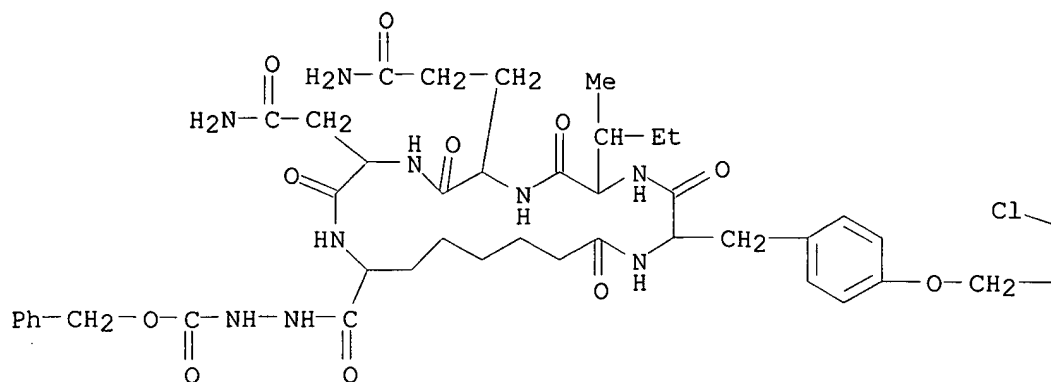
octyl]-O-(phenylmethyl)-L-seryl-L-asparaginyl-L-leucyl-O-(phenylmethyl)-L-  
seryl-O-(phenylmethyl)-, cyclic (5.fwdarw.1)-peptide, (S)- (9CI) (CA  
INDEX NAME)



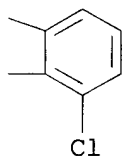
RN 139903-99-4 HCAPLUS  
CN L-Asparagine,  
N-[7-amino-1,8-dioxo-8-[2-[(phenylmethoxy)carbonyl]hydrazino]

]octyl]-O-[(2,6-dichlorophenyl)methyl]-L-tyrosyl-L-isoleucyl-L-glutaminyl-  
, cyclic (4.fwdarw.1)-peptide, (S)- (9CI) (CA INDEX NAME)

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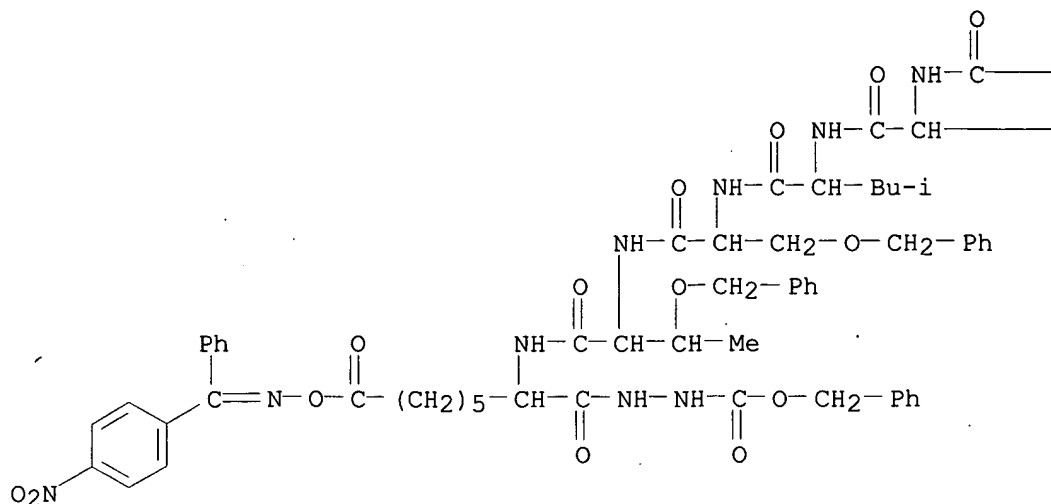


IT 139903-96-1DP, **resin** bound  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and **resin** cleavage-cyclization of)  
 RN 139903-96-1 HCAPLUS  
 CN L-Threoninamide, O-(phenylmethyl)-L-seryl-L-asparaginyl-L-leucyl-O-  
 (phenylmethyl)-L-seryl-N-[7-[[[(4-nitrophenyl)phenylmethylene]amino]oxy]-7-  
 oxo-1-[[2-[(phenylmethoxy)carbonyl]hydrazino]carbonyl]heptyl]-O-  
 (phenylmethyl)-, (S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

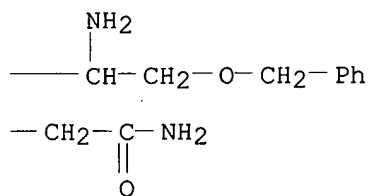
CM 1

CRN 139903-95-0  
 CMF C70 H83 N11 O16  
 CDES \*

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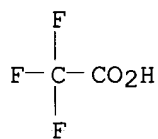
PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



IT 139903-94-9DP, resin-bound

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and **solid-phase** peptide **synthesis**  
 with)

RN 139903-94-9 HCAPLUS

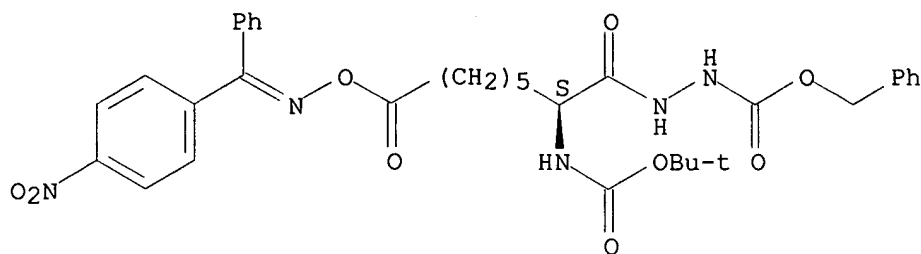
CN Hydrazinecarboxylic acid, 2-[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-8-  
 [[[(4-nitrophenyl)phenylmethylene]amino]oxy]-1,8-dioxooctyl]-,

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phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



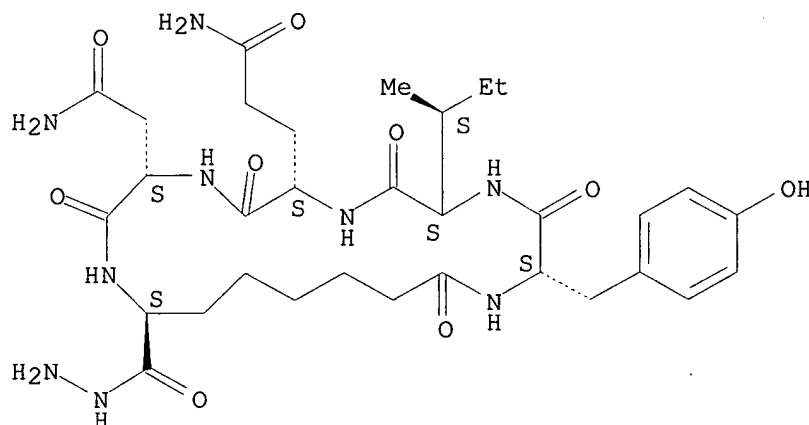
IT 83428-27-7P 139903-98-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, by solid-phase method on oxime resin)

RN 83428-27-7 HCAPLUS

CN 1,6-Dicarboxytocin, 1-butanoic acid-7-de-L-proline-8-de-L-leucine-9-deglycinamide-, hydrazide (9CI) (CA INDEX NAME)

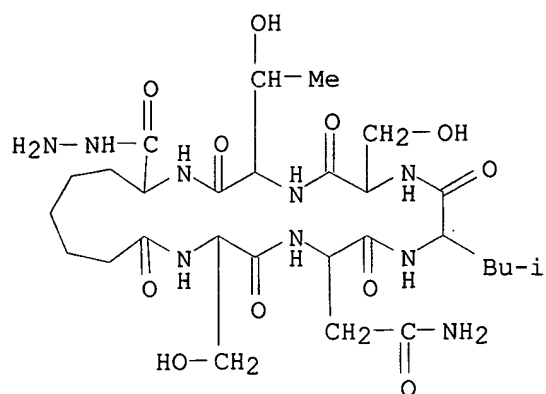
Absolute stereochemistry.



RN 139903-98-3 HCAPLUS

CN L-Threonine,

N-(7-amino-8-hydrazino-1,8-dioxooctyl)-L-seryl-L-asparaginyll-L-leucyl-L-seryl-, cyclic (5.fwdarw.1)-peptide, (S)- (9CI) (CA INDEX NAME)



103607-33-6P 107009-69-8P 108442-03-1P

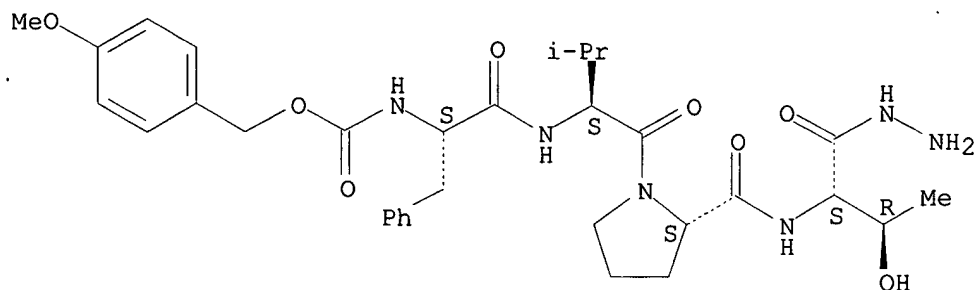
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as intermediate for **solid-phase****synthesis** of calcitonin related peptide derivs.)

RN 98748-34-6 HCAPLUS

CN L-Threonine, N-[1-[N-[N-[[[4-methoxyphenyl)methoxy]carbonyl]-L-phenylalanyl]-L-valyl]-L-prolyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 98748-38-0 HCAPLUS

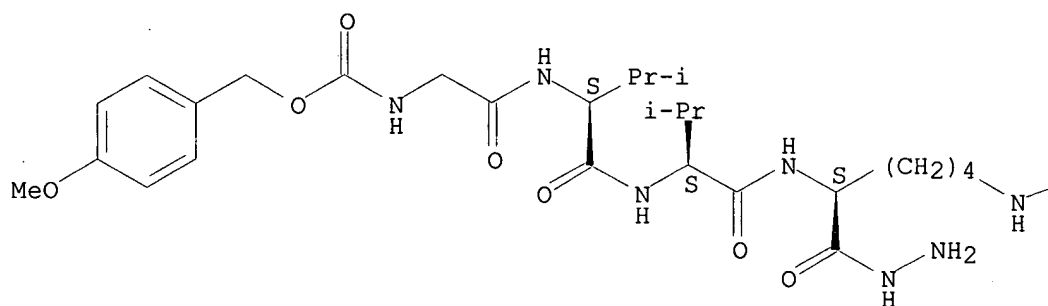
CN L-Lysine,

N2-[N-[N-[N-[[[4-methoxyphenyl)methoxy]carbonyl]glycyl]-L-valyl]-

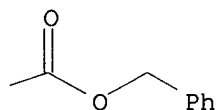
L-valyl]-N6-[(phenylmethoxy)carbonyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B



RN 98748-40-4 HCAPLUS

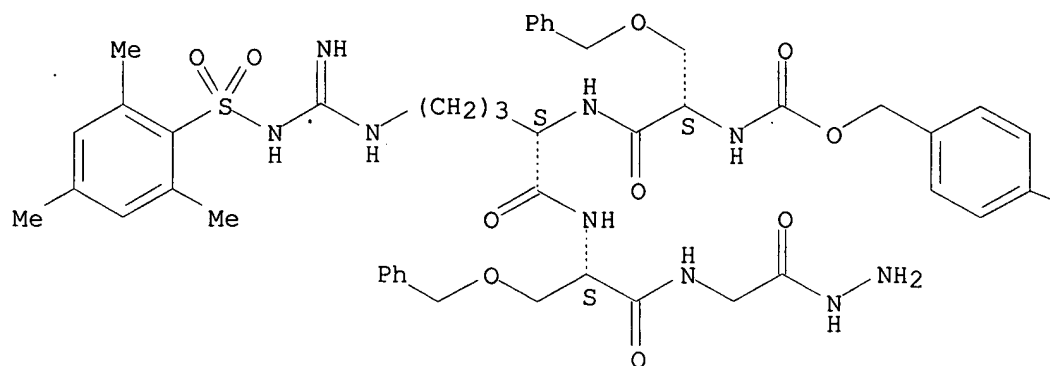
CN Glycine,

N-[N-[N5-[imino[[[2,6-dichlorophenyl]phenylsulfonyl]amino]ethyl]-N2-

[N-[[ (4-methoxyphenyl)methoxy]carbonyl]-O-(phenylmethyl)-L-seryl]-L-ornithyl]-O-(phenylmethyl)-L-seryl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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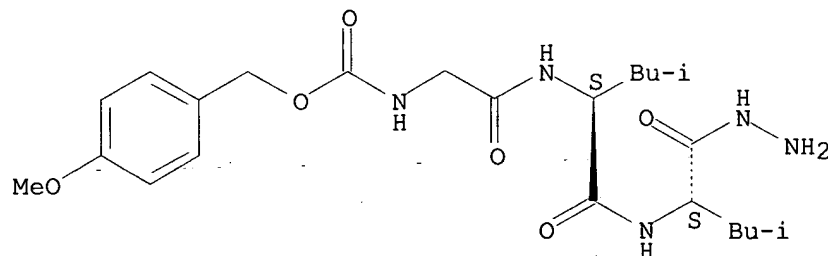
OMe

RN 98748-41-5 HCAPLUS

CN L-Leucine,

N-[N-[N-[[ (4-methoxyphenyl)methoxy]carbonyl]glycyl]-L-leucyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 98748-42-6 HCAPLUS

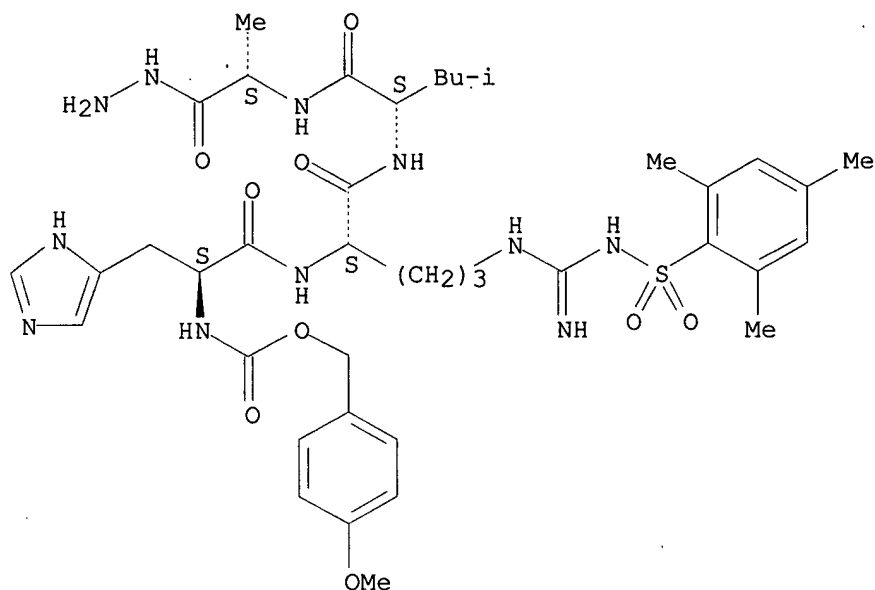
CN L-Alanine,

N-[N-[N5-[imino[[ (2,4,6-trimethylphenyl)sulfonyl]amino]methyl]-N2-[N-[[ (4-methoxyphenyl)methoxy]carbonyl]-L-histidyl]-L-ornithyl]-L-

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leucyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

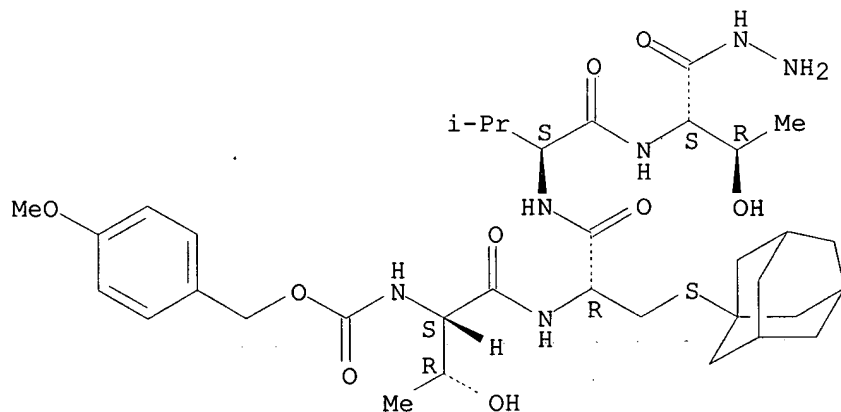


RN 98748-43-7 HCAPLUS

CN L-Threonine,

N-[N-[N-[[[4-methoxyphenyl)methoxy]carbonyl]-L-threonyl]-S-tricyclo[3.3.1.1.3,7]dec-1-yl-L-cysteinyl]-L-valyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

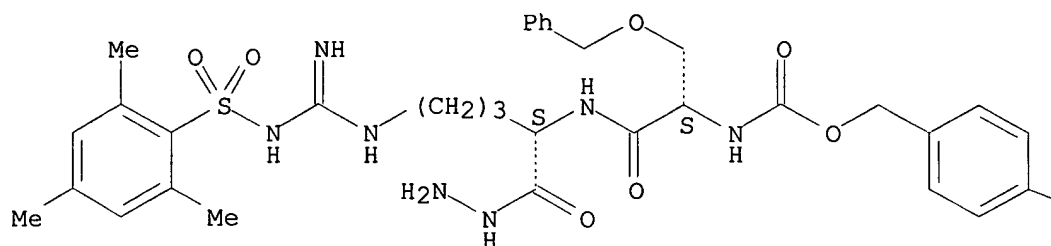


RN 103607-33-6 HCAPLUS

CN L-Ornithine, N5-[imino[[[(2,4,6-trimethylphenyl)sulfonyl]amino]methyl]-N2-[N-[[[4-methoxyphenyl)methoxy]carbonyl]-O-(phenylmethyl)-L-seryl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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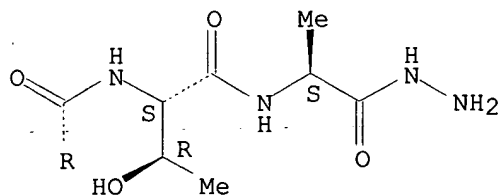
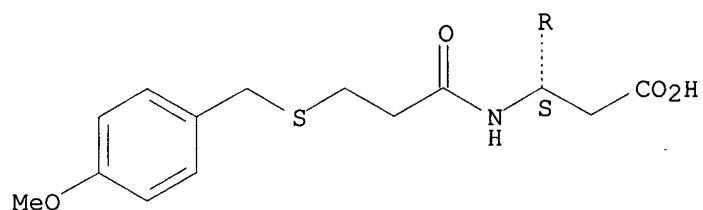
PAGE 1-B

— OMe

RN 107009-69-8 HCAPLUS

CN L-Alanine, N-[N-[N-[3-[[[4-methoxyphenyl)methyl]thio]-1-oxopropyl]-L-.alpha.-aspartyl]-L-threonyl]-, 1-hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 108442-03-1 HCAPLUS

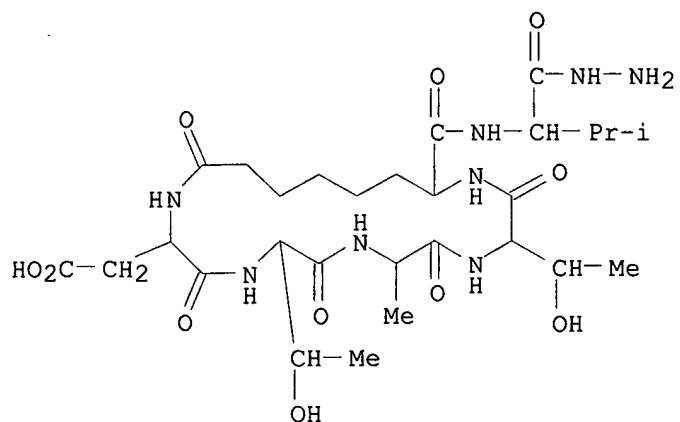
CN L-Valine,

L-.alpha.-aspartyl-L-threonyl-L-alanyl-L-threonyl-7-carboxy-L-2-aminoheptanoyl-, 6-hydrazide, cyclic (5.fwdarw.1)-peptide (9CI) (CA INDEX

Searched by John Dantzman

308-4488

NAME)



=> d bib abs hitstr 38

L23 ANSWER 38 OF 52 HCAPLUS COPYRIGHT 1999 ACS

AN 1986:553514 HCAPLUS

DN 105:153514

TI Solid-phase synthesis using a new polyacrylic **resin**. Synthesis of the fragment 14-21 of the amino acid sequence of histone H4

AU Calas, Bernard; Mery, Jean; Parello, Joseph; Cave, Adrien

CS Lab. Chim. Struct., USTL, Montpellier, 34060, Fr.

SO Tetrahedron (1985), 41(22), 5331-9

CODEN: TETRAB; ISSN: 0040-4020

DT Journal

LA English

OS CASREACT 105:153514

AB Title histone H4 fragment Ac-Gly-Ala-Lys-X-Arg-His-Arg-Lys-Val-OMe (I, X

=

null) as well as analog I (X = Leu) were prepd. by the solid-phase method on a new polyacrylic **resin** contg. a glycolamide ester linkage as an anchoring moiety between the **resin** and the peptide. Thus, the copolymer of N-acryloylpyrrolidine with CH<sub>2</sub>:CHCONHCH<sub>2</sub>CH<sub>2</sub>NHCOCH:CH<sub>2</sub>

and

CH<sub>2</sub>:CHCONHCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Me gave polyacrylic **resin** MeO<sub>2</sub>C-**resin**, which was amidated with H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> and then N-acylated with (BrCH<sub>2</sub>CO)<sub>2</sub>O to give BrCH<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>NHCO-**resin**. The latter was treated with Boc-Val-OCs (Boc = Me<sub>3</sub>CO<sub>2</sub>C) to give Boc-Val-OCH<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>NHCO-**resin**, which was used in the solid-phase synthesis of I (X = null, Leu). The final protected peptides were

cleaved

from the **resin** by methanolysis to give the corresponding protected peptide Me esters.

IT 104354-93-0P 104354-94-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrogenolysis of)

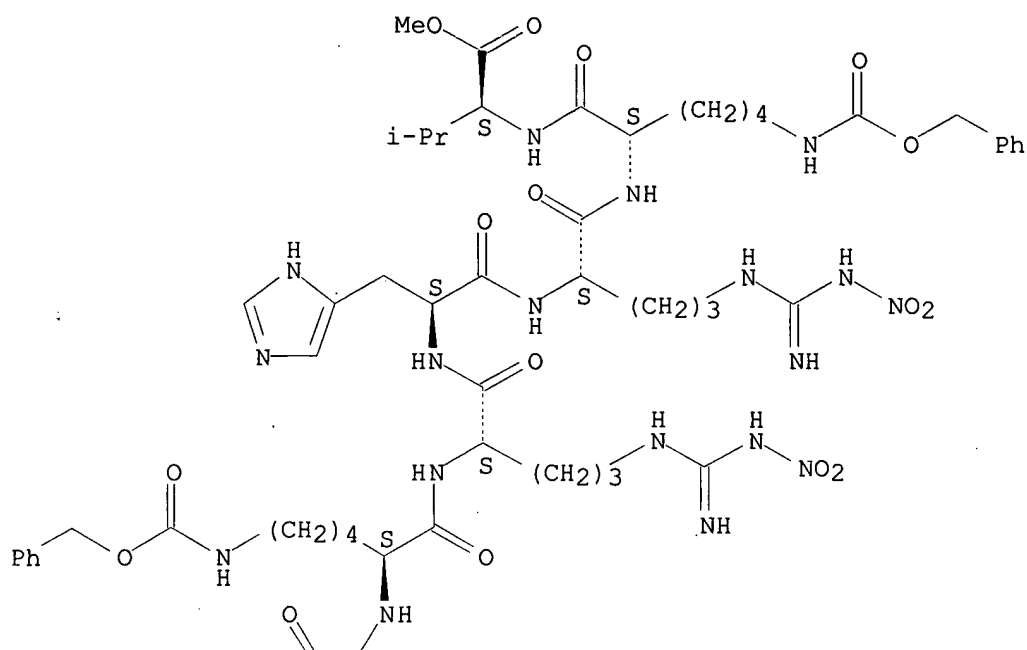
RN 104354-93-0 HCAPLUS

CN L-Valine, N-[N<sub>2</sub>-[N<sub>2</sub>-[N-[N<sub>2</sub>-[N<sub>2</sub>-[N-(N-acetylglycyl)-L-alanyl]-N<sub>6</sub>-[(phenylmethoxy)carbonyl]-L-lysyl]-N<sub>5</sub>-[imino(nitroamino)methyl]-L-ornithyl]-L-histidyl]-N<sub>5</sub>-[imino(nitroamino)methyl]-L-ornithyl]-N<sub>6</sub>-[(phenylmethoxy)carbonyl]-L-lysyl]-, methyl ester (9CI) (CA INDEX NAME)

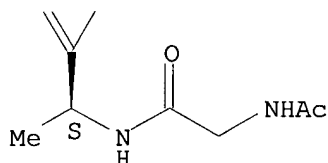
Absolute stereochemistry.



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PAGE 2-A



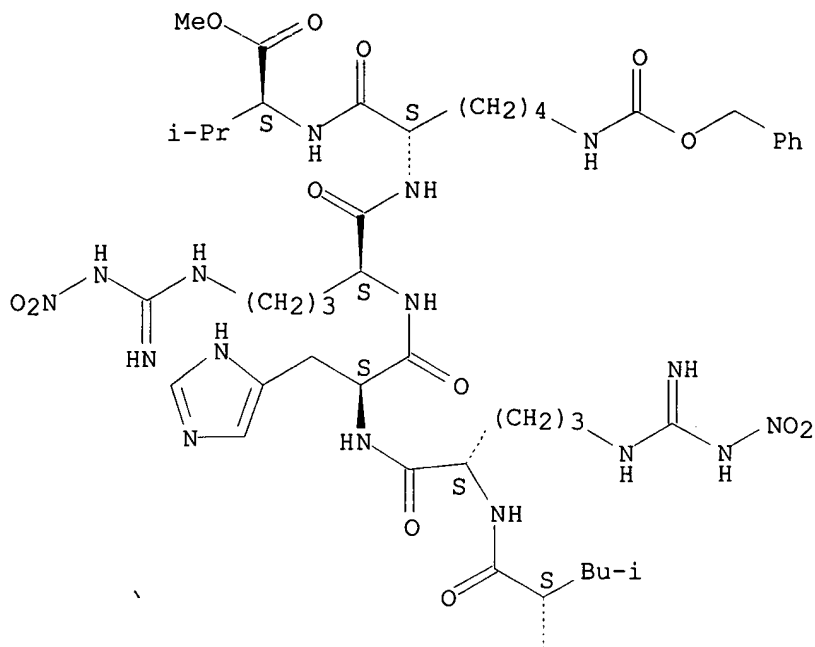
RN 104354-94-1 HCAPLUS

CN L-Valine, N-[N2-[N2-[N-[N2-[N-[N2-[N-(N-acetylglycyl)-L-alanyl]-N6-

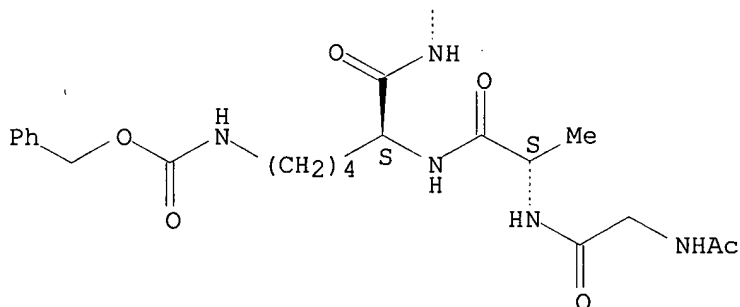
[(phenylmethoxy)carbonyl]-L-lysyl]-L-leucyl]-N5-[imino(nitroamino)methyl]-  
 L-ornithyl]-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-  
 [(phenylmethoxy)carbonyl]-L-lysyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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IT 104343-71-7DP, ester with glycolamide bound to polyacrylic resin 104343-72-8DP, ester with glycolamide bound to polyacrylic resin

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and methanolic resin cleavage of)

RN 104343-71-7 HCAPLUS

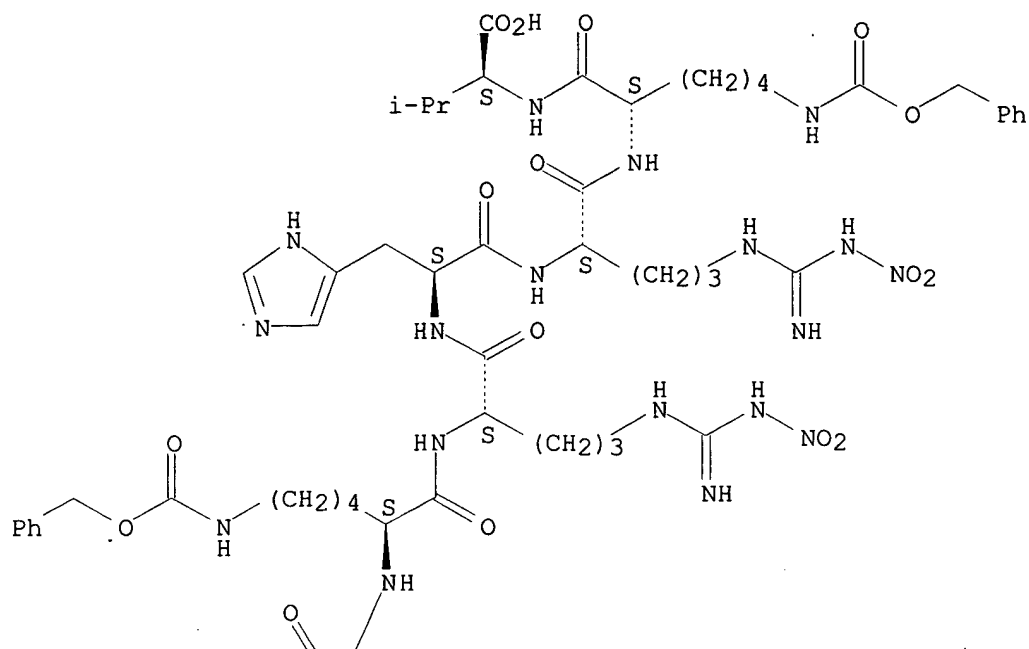
CN L-Valine, N-[N2-[N2-[N-[N2-[N2-[N-(N-acetylglucyl)-L-alanyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

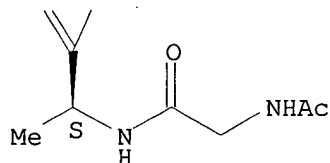
Searched by John Dantzman

308-4488

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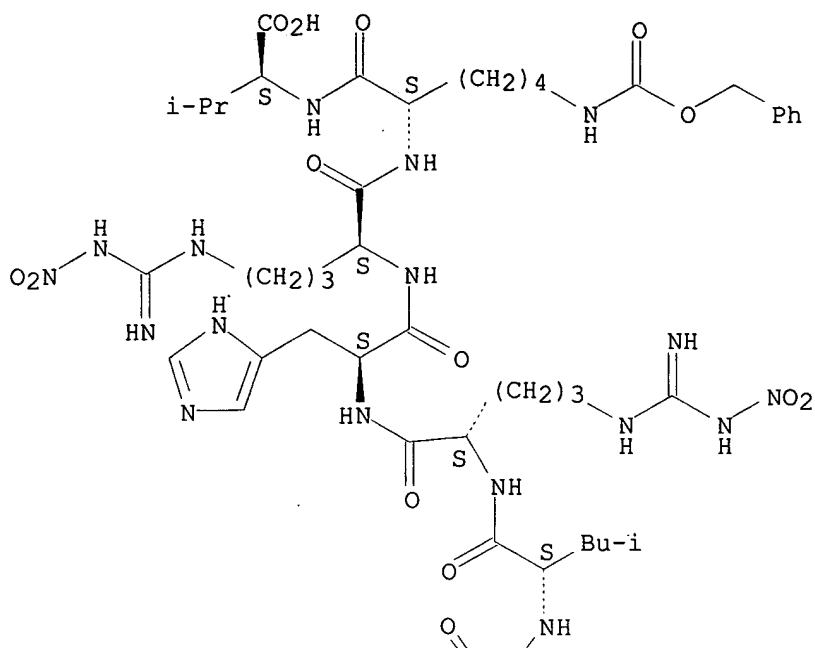
RN 104343-72-8 HCAPLUS

CN L-Valine, N-[N2-[N2-[N-[N2-[N-[N2-[N-(N-acetylglucyl)-L-alanyl]-N6-

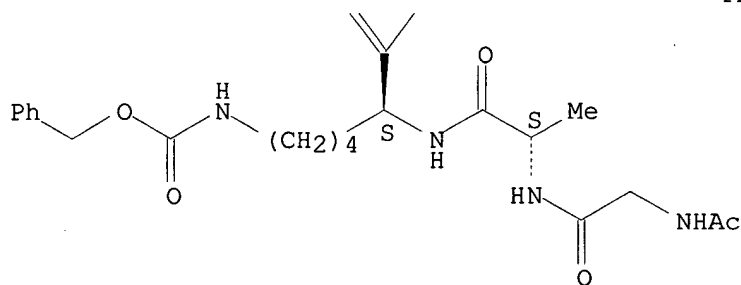
[(phenylmethoxy)carbonyl]-L-lysyl]-L-leucyl]-N5-[imino(nitroamino)methyl]-  
 L-ornithyl]-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-  
 [(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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IT 104343-74-0DP, ester with glycolamide bound to polyacrylic resin 104343-75-1DP, ester with glycolamide bound to polyacrylic resin

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and **solid-phase** peptide **synthesis** with)

RN 104343-74-0 HCAPLUS

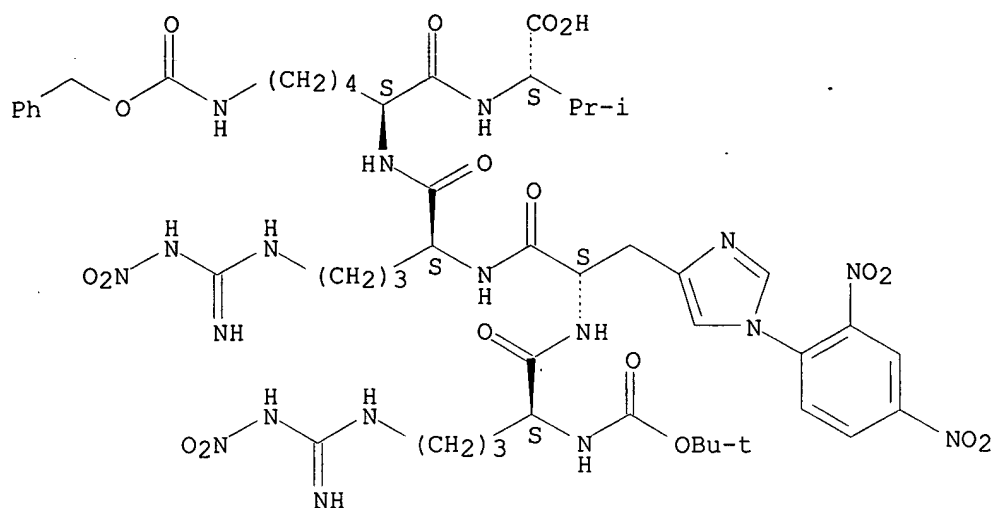
CN L-Valine, N-[N2-[N2-[N-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-

[imino(nitroamino)methyl]-L-ornithyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Searched by John Dantzman

308-4488

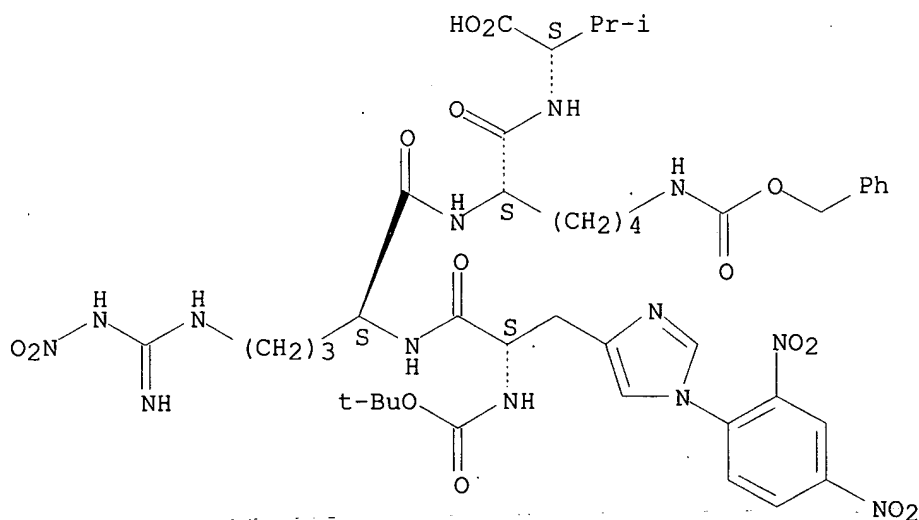
Absolute stereochemistry.



RN 104343-75-1 HCAPLUS

CN L-Valine, N-[N2-[N2-[N-[(1,1-dimethylethoxy)carbonyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 104343-69-3DP, ester with glycolamide bound to polyacrylic resin 104343-70-6DP, ester with glycolamide bound to polyacrylic resin

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and thiolysis of)

RN 104343-69-3 HCAPLUS

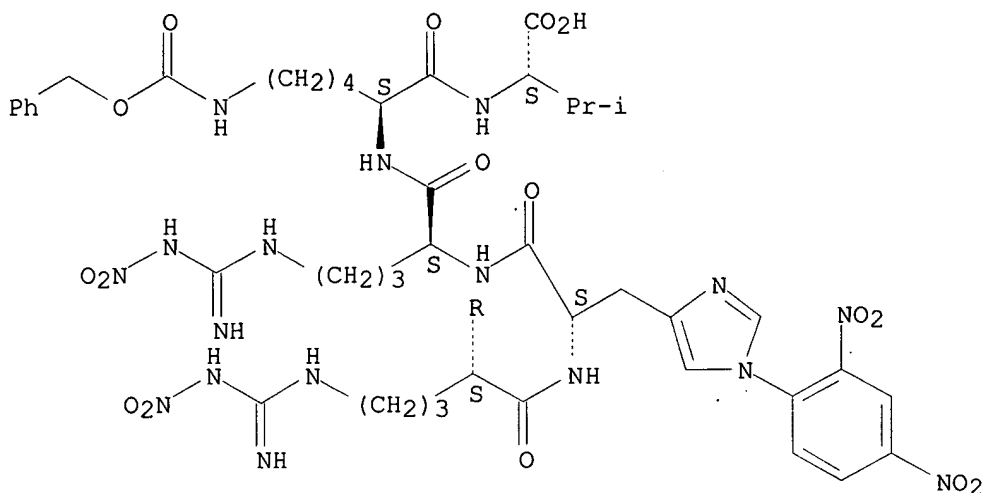
CN L-Valine, N-[N2-[N2-[N-[N2-[N2-[N-(N-acetylglucyl)-L-alanyl]-N6-

Searched by John Dantzman 308-4488

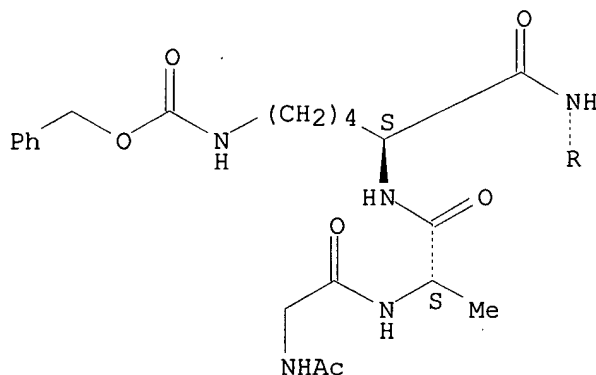
[(phenylmethoxy)carbonyl]-L-lysyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 104343-70-6 HCAPLUS

CN L-Valine, N-[N2-[N2-[N-[N2-[N-[N2-[N-(N-acetylglycyl)-L-alanyl]-N6-

[(phenylmethoxy)carbonyl]-L-lysyl]-L-leucyl]-N5-[imino(nitroamino)methyl]-

L-ornithyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-

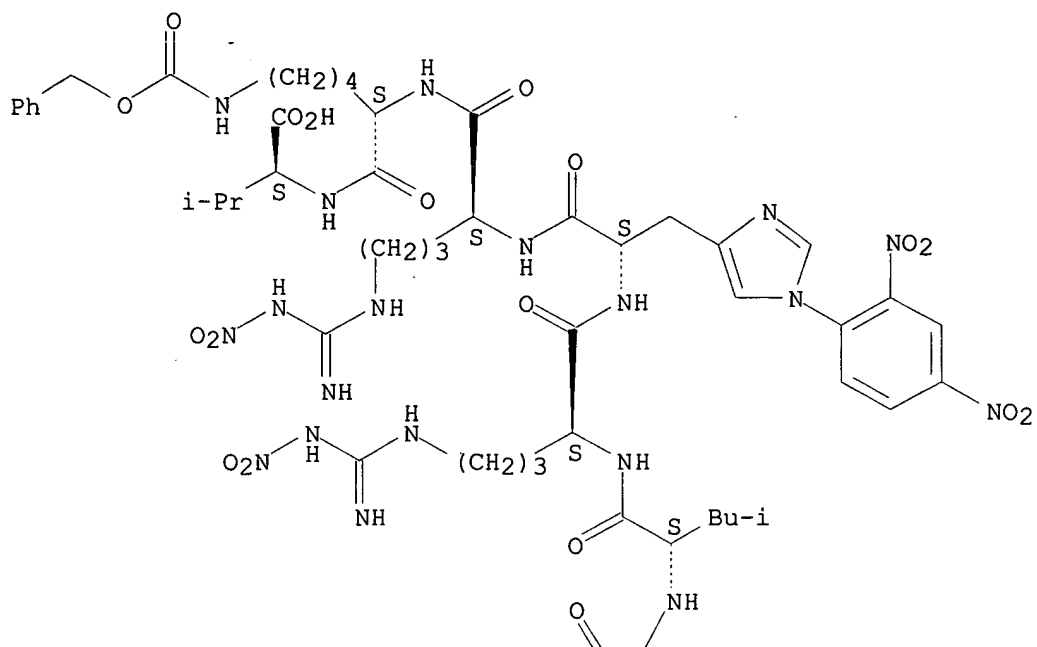
L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

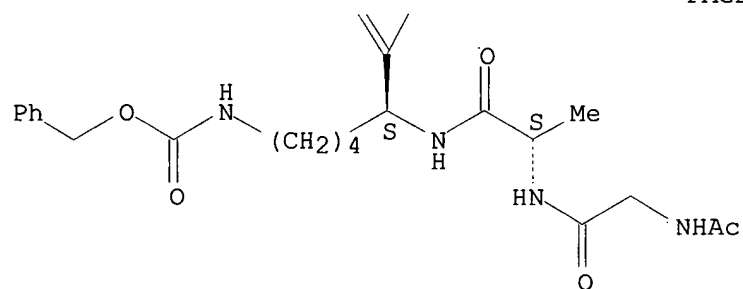
Searched by John Dantzman

308-4488

PAGE 1-A



PAGE 2-A



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NEWS 3 Oct 27 New Extraction Code PAX now available in Derwent  
Files  
NEWS 4 Oct 27 SET ABBREVIATIONS and SET PLURALS extended in  
Derwent World Patents Index files  
NEWS 5 Oct 27 Patent Assignee Code Dictionary now available  
in Derwent Patent Files  
NEWS 6 Oct 27 Plasdoc Key Serials Dictionary and Echoing added to  
Derwent Subscriber Files WPIDS and WPIX  
NEWS 7 Nov 29 Derwent announces further increase in updates for DWPI  
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NEWS 11 Dec 17 Merged CEABA-VTB for chemical engineering and  
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=> s murphy a?/au

L1 512 MURPHY A?/AU

=> s l1 and "resin?"

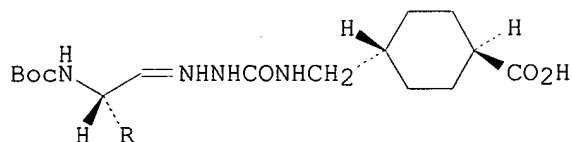
L2 6 L1 AND "RESIN?"

=> s l1 and "semicarbazone?"

L3 1 L1 AND "SEMICARBAZONE?"

=> d l3 ibib abs

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1992:194851 CAPLUS  
DOCUMENT NUMBER: 116:194851  
TITLE: Automated synthesis of peptide C-terminal aldehydes  
AUTHOR(S): **Murphy, Aileen M.**; Dagnino, Raymond, Jr.;  
Vallar, Pureza L.; Trippe, Anthony J.; Sherman,  
Shannon L.; Lumpkin, Richard H.; Tamura, Susan Y.;  
Webb, Thomas R.  
CORPORATE SOURCE: Corvas Int. Inc., San Diego, CA, 92121, USA  
SOURCE: J. Am. Chem. Soc. (1992), 114(8), 3156-7  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB The title compds., e.g. Boc-D-Leu-X-Arg-H (Boc = Me<sub>3</sub>CO<sub>2</sub>C; X = Pro, Ser) and Boc-Ala-Ala-Pro-X<sub>1</sub>-H (X<sub>1</sub> = Ala, Val, Phe) were prepd. by the solid phase method using linkers I [R = (protected) amino acid side chain]. Peptides are assembled using std. Boc protocols, and cleaved from the resin with dil. aq. acid/formaldehyde to give protected peptide C-terminal aldehydes. Argininal-contg. peptide aldehydes with various hydrogen/Pd labile protecting groups can be deprotected in a single step to give the unprotected peptide aldehydes after purifn. by reverse-phase HPLC.

=> d his

(FILE 'HOME' ENTERED AT 14:25:03 ON 24 JAN 2001)

FILE 'CAPLUS, CAOLD' ENTERED AT 14:25:23 ON 24 JAN 2001

L1 512 S MURPHY A?/AU  
L2 6 S L1 AND "RESIN?"  
L3 1 S L1 AND "SEMICARBAZONE?"

=> s l2 and l3

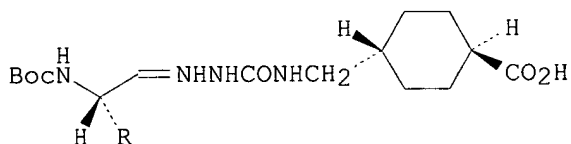
L4 1 L2 AND L3

=> d l4

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS  
AN 1992:194851 CAPLUS  
DN 116:194851  
TI Automated synthesis of peptide C-terminal aldehydes  
AU **Murphy, Aileen M.**; Dagnino, Raymond, Jr.; Vallar, Pureza L.;  
Trippe, Anthony J.; Sherman, Shannon L.; Lumpkin, Richard H.; Tamura,  
Susan Y.; Webb, Thomas R.  
CS Corvas Int. Inc., San Diego, CA, 92121, USA  
SO J. Am. Chem. Soc. (1992), 114(8), 3156-7  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English

=> d l2 1-6 ibib abs

L2 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1992:194851 CAPLUS  
DOCUMENT NUMBER: 116:194851  
TITLE: Automated synthesis of peptide C-terminal aldehydes  
AUTHOR(S): **Murphy, Aileen M.**; Dagnino, Raymond, Jr.;  
Vallar, Pureza L.; Trippe, Anthony J.; Sherman,  
Shannon L.; Lumpkin, Richard H.; Tamura, Susan Y.;  
Webb, Thomas R.  
CORPORATE SOURCE: Corvas Int. Inc., San Diego, CA, 92121, USA  
SOURCE: J. Am. Chem. Soc. (1992), 114(8), 3156-7  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB The title compds., e.g. Boc-D-Leu-X-Arg-H (Boc = Me<sub>3</sub>CO<sub>2</sub>C; X = Pro, Ser) and Boc-Ala-Ala-Pro-X<sub>1</sub>-H (X<sub>1</sub> = Ala, Val, Phe) were prepd. by the solid phase method using linkers I [R = (protected) amino acid side chain]. Peptides are assembled using std. Boc protocols, and cleaved from the **resin** with dil. aq. acid/formaldehyde to give protected peptide C-terminal aldehydes. Argininal-contg. peptide aldehydes with various hydrogen/Pd labile protecting groups can be deprotected in a single step to give the unprotected peptide aldehydes after purifn. by reverse-phase

L2 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1972:477429 CAPLUS  
DOCUMENT NUMBER: 77:77429  
TITLE: Material performance of carbon phenolic ablators and  
pyrolytic graphite coatings in nozzles subjected to  
multiple pulse duty cycles  
AUTHOR(S): Wool, Mitchell R.; Baker, Duane L.; **Murphy,**  
**Andrew J.**  
CORPORATE SOURCE: Aerotherm Corp., Mountain View, Calif., USA  
SOURCE: U. S. Nat. Tech. Inform. Serv., AD Rep. (1971), No.  
738622, 161 pp. Avail.: NTIS  
From: Gov. Rep. Announce. (U.S.) 1972, 9, 266  
CODEN: XADRCH  
DOCUMENT TYPE: Report  
LANGUAGE: English

AB Measurements and anal. of the thermal and ablative response of 5  
multiple-pulse duty-cycle rocket nozzles were performed. Nozzles were  
fired on a solid-propellant simulator with a test stream compn.,  
designated ANB-3066, that contained 16% Al. Nominal chamber pressure for  
each of the various firing pulses was 750 psia. Material temp. histories  
were recorded at several locations in each nozzle. Post-test measurements  
of surface recession, char penetration, and d. vs. depth, as well as  
thermocouple data, are used for comparison with 1- and 2-dimensional heat  
conduction and material-ablation calcsns.

L2 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1970:122873 CAPLUS  
DOCUMENT NUMBER: 72:122873  
TITLE: Crosslinked cotton textiles  
INVENTOR(S): **Murphy, Alton Launcelot**; Welch, Clark M.;  
Margavio, Matthew F.; Cooper, Albert S., Jr.  
PATENT ASSIGNEE(S): United States Dept. of Agriculture  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	----	-----	-----
US 3498739	A	19700303	US 1965-426452	19650118
AB	Wash-and-wear crosslinked cotton fabrics with improved tearing and breaking strength were prepd. from pretreated yarns finished with HCHO, dimethylolethyleneurea (I), tris(1-aziridiny)phosphine oxide (II), or bis(2-hydroxyethyl) sulfone (III) and a catalyst, then dry-cured. Thus, a 200-yd skein of 31/2 gray yarn was mercerized at normal length 5 min with 11% NaOH plus 1% cresylic wetting agent at 0.degree., washed, and air-dried loose, treated loose 5 min with an aq. soln. contg. 7% I and 0.5% buffered Zn(NO3)2, centrifuged to 70-80% wet pickup, and dried loose 4 min at 85.degree.. After curing 4 min at 150.degree., the skeins were washed in hot water with a 0.1 % nonionic wetting agent and dried loose 40 min at 85.degree. to 3.6% add-on to give 897 g breaking strength (24% increase). Similar results were obtained using finishes contg. 11% II and 0.77% Zn(BF4)2, 9% III and 2% Na2CO3, or 7.5% HCHO and 2% MgCl2.			

L2 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1970:42385 CAPLUS  
DOCUMENT NUMBER: 72:42385  
TITLE: Lightweight urea-formaldehyde fertilizers  
INVENTOR(S): **Murphy, Allen Milton, Jr.**; Retzke, Franklin  
A.; Johnson, John Raymond

PATENT ASSIGNEE(S): Borden Co.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3479175	A	19691118	US 1966-592291	19661107
AB	Complete fertilizers of low bulk d. are prepd. by mixing urea with dry sources of HCHO, phosphate, and potash, heating to 160.degree.-75.degree.F., extruding, and cooling to obtain high N and P contg. granules. An example of a HCHO source is paraformaldehyde (I); the urea/I mole ratio is crit. and must be >6. The final mixt. contains >30% urea + urea-HCHO <b>resin</b> , >20% total N, and has a bulk d. <40 lb/ft3. The granule diam. is 0.065-0.131 in. For example, ground cryst. urea 1436, (NH4)2HPO4 189, KCl 334, and finely ground I 41 lb. were mixed, heated to 165.degree.F. and extruded to prod uce 6-10 mesh particles of bulk d. 38 lb/ft3. Product anal. was N 35.18, P2O5 5.50, and K2O 9.92%. The fertilizer is useful on lawns and gardens.				

L2 ANSWER 5 OF 6 CAOLD COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: CA25:2575a CAOLD  
 TITLE: Dye intermediates  
 AUTHOR NAME: Mieg, W.; Stein, B.; Trautner, W.  
 DOCUMENT TYPE: Patent  
 TITLE: Fuchsin  
 AUTHOR NAME: Ignatyev, S. N.; Vasin, I. I.  
 DOCUMENT TYPE: Patent  
 TITLE: Pastes from insol. mordant dyes  
 AUTHOR NAME: Vinetzkaya, E. Ya.  
 DOCUMENT TYPE: Patent  
 TITLE: Pasting S dyes with **resin** soaps  
 AUTHOR NAME: Schweitzer-Hennig, F.; Hagge, W.  
 DOCUMENT TYPE: Patent  
 TITLE: anthanthrone derivs.  
 AUTHOR NAME: Kunz, M. A.; Koberle, K.; Berthold, E.  
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.  
 DOCUMENT TYPE: Patent  
 TITLE: benzoin condensation products  
 PATENT ASSIGNEE: Societe pour l'industrie chimique a Bale  
 DOCUMENT TYPE: Patent  
 TITLE: bisulfite compd. of alizarin blue  
 AUTHOR NAME: Razumeev, A.  
 DOCUMENT TYPE: Patent  
 TITLE: dye intermediates  
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.  
 DOCUMENT TYPE: Patent  
 TITLE: dyes (sulfur)  
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.  
 DOCUMENT TYPE: Patent  
 TITLE: improving the soly. of dyes  
 AUTHOR NAME: **Murphy, A. R.**; Oesch, J. B.  
 PATENT ASSIGNEE: Newport Chemical Corp.  
 DOCUMENT TYPE: Patent  
 TITLE: parafuchsin  
 AUTHOR NAME: Ignatyev, S. N.; Vasin, I. I.  
 DOCUMENT TYPE: Patent  
 TITLE: pasting S dyes with **resin** soaps  
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.  
 DOCUMENT TYPE: Patent

PATENT NO.	KIND	DATE
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PI	DE 517498	
PI	DE 518198	
PI	DE 518231	
PI	FR 37391	Addition
PI	FR 37484	Addition
PI	GB 338764	
PI	GB 339324	
PI	GB 339410	
PI	RU 22888	Application
PI	RU 49462	Application
PI	RU 50998	Application
PI	RU 59307	Application
PI	US 1796115	1931

L2 ANSWER 6 OF 6 CAOLD COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: CA24:514a CAOLD  
 TITLE: "ripening" of copals  
 AUTHOR NAME: Scheiber, J.  
 TITLE: Detn. of the acid index in the manuf. of varnishes  
 AUTHOR NAME: Demolder, L.  
 TITLE: Effect of different methods of application with different  
 woods on the durability of spar varnish  
 AUTHOR NAME: Friese, R. W.; Meyer, J. H.; Zinzer, A.; **Murphy, A.**  
 TITLE: Effect of plasticizers in clear and pigmented varnishes  
 AUTHOR NAME: Harrison, W. F.  
 TITLE: Fresco ordeal-its chem. and artistic implications  
 AUTHOR NAME: Wilson, T.  
 TITLE: Okume **resin**  
 AUTHOR NAME: Tomeo (Tomeo-Lacrue), M.; Garcia-Viana, J.  
 TITLE: Technology of cellulose acetate-its relation to plasticizers  
 and solvents  
 AUTHOR NAME: Staud, C. J.  
 TITLE: Use of synthetic **resins** in lacquer and varnish  
 AUTHOR NAME: Stauderman, A. E.  
 TITLE: Varnish fires  
 AUTHOR NAME: Langton, J. M.  
 TITLE: boiled linseed oil  
 AUTHOR NAME: Remington, J. S.

=> s "semicarbazone?"

L5 3558 "SEMICARBAZONE?"

=> s 15 and "resin?"

L6 45 L5 AND "RESIN?"

=> dup rem

ENTER L# LIST OR (END):16

DUPLICATE IS NOT AVAILABLE IN 'CAOLD'.  
 ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE  
 PROCESSING COMPLETED FOR L6  
 L7 45 DUP REM L6 (0 DUPLICATES REMOVED)

=> d 17 1-10 ibib abs

L7 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:277960 CAPLUS  
 DOCUMENT NUMBER: 132:308661

TITLE: Preparation of (substituted)acyl dipeptidyl inhibitors of the ice/ced-3 family of cysteine proteases  
 INVENTOR(S): Karanewsky, Donald S.; Kalish, Vincent J.; Robinson, Edward D.; Ullman, Brett R.  
 PATENT ASSIGNEE(S): Idun Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 142 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000023421	A1	20000427	WO 1999-US24756	19991022
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1998-177546 19981022

OTHER SOURCE(S): MARPAT 132:308661

AB Compds. of formula  $R_1X(CH_2)_nCHR_2CO-A-NHCH[(CH_2)_qCO_2R_3]CO-B$  [A is a natural or unnatural amino acid; B = H, D, alkyl, cycloalkyl, (un)substituted Ph or naphthyl, 2-benzoxazolyl, halomethyl,  $(CH_2)_m$ cycloalkyl,  $(CH_2)_m(1-$  or  $2-$ naphthyl), substituted 2-oxazolyl, (un)substituted  $(CH_2)_m$ phenyl,  $CH_2OCO(aryl)$ , or  $CH_2OCO(heteroaryl)$ , etc.; X =  $CH_2$ , CO, O, S, NH, CONH,  $CH_2OCONH$ ;  $R_1$  = (un)substituted Ph, naphthyl, or heteroaryl;  $R_2$  = H, alkyl, cycloalkyl, (un)substituted Ph,  $(CH_2)_mNH_2$ , (un)substituted  $(CH_2)_m$ phenyl,  $(CH_2)_m$ cycloalkyl,  $(CH_2)_m$ heteroaryl, etc.;  $R_3$  = H, alkyl, cycloalkyl, (cycloalkyl)alkyl, (un)substituted phenylalkyl; m = 1-4, n = 0-2; q = 1-2] or their pharmaceutically acceptable salts were prep'd. as inhibitors of ICE/ced-3 family of cysteine proteases (ICE = interleukin-1.β. converting enzyme). Thus, coupling of (1-naphthylamino)acetic acid with (3S)-3-(leucinylamino)-4-oxobutanoic acid tert-Bu ester **semicarbazone** (prepn. given) followed by deprotection of the resulting intermediate with TFA, and treatment with a 3:1:1 soln. of MeOH/AcOH/37% HCHO afforded (3S)-3-[[N-((1-naphthylamino)acetyl)leuciny]amino]-4-oxobutanoic acid which showed  $IC_{50} = 0.033 \mu M$  for mICE,  $0.013 \mu M$  for CPP32, and  $0.037 \mu M$  for MCH-2 enzyme assays, resp. The invention is also directed to pharmaceutical compns. contg. these compds., as well as the use of such compns. in the treatment of patients suffering inflammatory, autoimmune and neurodegenerative diseases, for the prevention of ischemic injury, and for the preservation of organs that are to undergo a transplantation procedure.

REFERENCE COUNT: 16

REFERENCE(S): (1) Becker, M; US 5714484 A 1998 CAPLUS  
 (2) Bemis, G; US 5656627 A 1997 CAPLUS  
 (3) Ferring Res Ltd; GB 2292149 A 1996 CAPLUS  
 (5) Merck & Co Inc; WO 9966945 A 1999 CAPLUS  
 (6) Ono Pharmaceutical Co; EP 0761680 A 1997 CAPLUS  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:84821 CAPLUS

DOCUMENT NUMBER: 132:137730

TITLE: Preparation of derivatized **resins** useful for solid-phase peptide synthesis, combinatorial chemistry, and peptide or protein purification and separation

INVENTOR(S): Siev, Daniel V.; Semple, J. Edward; Weinhouse, Michael I.  
 PATENT ASSIGNEE(S): Corvas International Inc., USA  
 SOURCE: PCT Int. Appl., 96 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000005243	A2	20000203	WO 1999-US16828	19990723
WO 2000005243	A3	20000420		

W: JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1998-122576 19980724

OTHER SOURCE(S): CASREACT 132:137730

AB This invention provides a method for producing a derivatized **resin** of formula  $R_4NH(C:X)Y-Z-SS$  [ $R_4$  = (un)protected  $NH_2$  or  $OH$ ;  $X = O, S, NR_7$ ;  $R_7 = H, \text{alkyl, alkenyl, aryl, aralkyl, cycloalkyl, heterocyclyl}$ ;  $Y = \text{absent, NH, CH}_2$ ;  $Z = \text{absent, NH, O, CO, S, SO}_2, \text{alkyl, alkenyl, aryl, aralkyl, cycloalkyl, heterocyclyl, and combinations thereof, with provisos}$ ;  $SS = \text{solid support}$ ], useful in the arts of solid-phase peptide synthesis, combinatorial chem., and peptide or protein purifn. and sepn. Methods for synthesizing the derivatized **resin**, the prototypical example of which is hydrazyl-carbonyl-aminomethylated polystyrene (HCAM **resin**), are disclosed. Thus, aminomethylated polystyrene was coupled with t-Bu carbazate using 1,1-carbonyldiimidazole in DMF and deprotected with DCM/TFA to give HCAM **resin**. Alternatively, HCAM **resin** was also prepd. by coupling of hydrazine to aminomethylated polystyrene using 1,1-carbonyldiimidazole in DMF. Reaction of an aldehyde or ketoamide with the free amino group of the **resin** results in an immobilized product, through a **semicarbazone** moiety, which can be manipulated using std. solid-phase peptide synthetic methods. As opposed to known methods for peptide aldehyde or ketoamide synthesis, the process of this invention provides, among other benefits, a method of solid-phase peptide or peptide analog synthesis that minimizes the amt. of soln. phase synthetic steps required.

L7 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:34853 CAPLUS

DOCUMENT NUMBER: 132:93655

TITLE: Preparation of C-terminal modified oxamyl dipeptides as inhibitors of the ICE/ced-3 family of cysteine proteases

INVENTOR(S): Karanewsky, Donald S.; Ternansky, Robert J.

PATENT ASSIGNEE(S): Idun Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001666	A1	20000113	WO 1999-US15074	19990701
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,				

TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9948569 A1 20000124 AU 1999-48569 19990701  
PRIORITY APPLN. INFO.: US 1998-91689 19980702  
US 1998-177549 19981022  
WO 1999-US15074 19990701

OTHER SOURCE(S): MARPAT 132:93655

AB Oxamyl dipeptides R1NHCOCO-A-NHCH(CO-B)CH2CO2R2 [A is a natural or  
unnatural amino acid; B = H, D, cycloalkyl, (un)substituted Ph or  
naphthyl, 2-benzoxazolyl, substituted 2-oxazolyl, halomethyl,  
(CH2)ncycloalkyl, (CH2)nphenyl, (CH2)n(1- or 2-naphthyl), (CH2)nheteroaryl  
(n = 1-4), etc.; R1 = alkyl, cycloalkyl, cycloalkylalkyl, (un)substituted  
Ph, phenylalkyl, or naphthyl, etc.; R2 = H, alkyl, cycloalkyl,  
cycloalkylalkyl, (un)substituted Ph, phenylalkyl, naphthyl, or  
naphthylalkyl] were prepd. as inhibitors of the ICE/ced-3 family of  
cysteine protease (ICE = interleukin-1.beta. converting enzyme). Thus,  
(3S)-3-[[N-(1-naphthyloxamyl)leuciny]amino]-4-oxobutanoic acid, prepd.  
via coupling of 1-naphthyloxamic acid with (3S)-3-(leucinylamino)-4-  
oxobutanoic acid tert-Bu ester **semicarbazone**, showed IC50 =  
0.027 .mu.M for mICE and IC50 = 0.010 .mu.M for CPP32 enzyme assays.

REFERENCE COUNT: 3

REFERENCE(S): (1) Sandoz Ltd; EP 0618223 A 1994 CAPLUS  
(2) Sterling Winthrop Inc; EP 0623592 A 1994 CAPLUS  
(3) Vertex Pharma; WO 9722619 A 1997 CAPLUS

L7 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:233888 CAPLUS

DOCUMENT NUMBER: 132:254542

TITLE: Polymer-coated sand for shell molds with minimized  
formaldehyde release

INVENTOR(S): Suzuki, Noriaki; Nagasaka, Eiichi; Kaji, Kenji;  
Tomishige, Hiromi

PATENT ASSIGNEE(S): Aisin Kako Co., Ltd., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000102841	A2	20000411	JP 1998-275400	19980929

AB The sand has thermosetting **resin** coatings contg. carboxylic acid  
hydrazide. The coatings may also contain .gtoreq.1 N-contg. compds.  
selected from urea, thioureas, arom. compds. (e.g. aminophenol,  
phenylhydrazine, aniline), amides (e.g. acetamide, acetanilide), and  
**semicarbazone**. Strong molds with minimized formaldehyde gas  
generation are obtained.

L7 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:796267 CAPLUS

TITLE: Solid phase synthesis of caspase-3 inhibitors.

AUTHOR(S): Grimm, Erich L.; Aspiotis, R.; Bayly, C.;  
Garcia-Calvo, M.; Giroux, A.; Han, Yongxin; McKay, D.;  
Nicholson, D.; Peterson, E.; Rasper, D.; Renaud, J.;  
Roy, S.; Tam, J.; Tawa, P.; Thornberry, N.;  
Vaillancourt, J.; Zamboni, R.; Xanthoudakis, S.

CORPORATE SOURCE: Merck Frosst Centre for Therapeutic Research,  
Kirkland, QC, H9H 3L1, Can.

SOURCE: Abstr. Pap. - Am. Chem. Soc. (2000), 220th, MEDI-268



PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal; Meeting Abstract  
LANGUAGE: English

AB Aspartyl aldehyde and ketone libraries can be readily accessed using Webb's **semicarbazone** linker on Merrifield **resin**. This strategy has lead to the identification of small capped peptidyl ketone derivs. with good intrinsic potency and selectivity for caspase-3. Improved cell permeability of these compds. with respect to the tetrapeptide inhibitors has also been demonstrated in both the Caco Assay and the Filtration Assay using radiolabeled drugs.

L7 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:182809 CAPLUS

DOCUMENT NUMBER: 132:199650

TITLE: Ion-exchange studies of **resin** copolymers derived from aromatic hydroxy compounds

AUTHOR(S): Das, S. C.

CORPORATE SOURCE: Department of Chemistry, S. V. M. College, Jagatsinghpur, 754 103, India

SOURCE: J. Indian Chem. Soc. (2000), 77(2), 66-69

CODEN: JICSAH; ISSN: 0019-4522

PUBLISHER: Indian Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The ion-exchange capacity, effect of electrolytes on metal uptake, rate of metal uptake and distribution of metal ion at different pHs of **resin** copolymers derived from thiosemicarbazone derivs. of phenolic compds. shows higher order than the **resin** copolymer derived from **semicarbazone** derivs. The results are compared with the com. ion-exchangers.

REFERENCE COUNT: 6

REFERENCE(S): (1) Cotton, F; Advance Inorganic Chemistry, 3rd ed. 1972

(2) Das, S; J Polym Mater 1997, V14, P219 CAPLUS

(3) Davadov, S; Coord Chem Rev 1975, V16, P195

(5) Mohanty, P; J Appl Polym Sci 1991, V42, P2261 CAPLUS

(6) Senapati, M; J Appl Polym Sci 1992, V45, P521 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:788495 CAPLUS

DOCUMENT NUMBER: 132:222836

TITLE: Novel Hydrazino-Carbonyl-Amino-Methylated polystyrene (HCAM) **resin** methodology for the synthesis of P1-aldehyde protease inhibitor candidates

AUTHOR(S): Siev, Daniel V.; Semple, J. Edward

CORPORATE SOURCE: Department of Medicinal Chemistry, Corvas International Inc., San Diego, CA, 92121, USA

SOURCE: Org. Lett. (2000), 2(1), 19-22

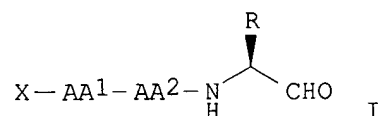
CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB A new strategy for the synthesis of peptidyl and peptidomimetic aldehydes I [X = Cbz, PhCH<sub>2</sub>SO<sub>2</sub>, PhCO, MeCO; AA1 = homoGlu, Asp; AA2 = Sar, Nva; AA1AA2 = 3(S)-amino-2-oxo-1-piperidinoacetyl; R = (CH<sub>2</sub>)<sub>3</sub>NHC(:NH)NH<sub>2</sub>, CH<sub>2</sub>C.tplbond.CH, CH<sub>2</sub>CH:CH<sub>2</sub>, CH<sub>2</sub>SMe] on HCAM solid support is described. The appropriate C-terminal aldehyde precursors were prepd. and anchored to a **resin** support via a **semicarbazone** linkage (HCAM **resin**). After synthetic elaboration, acidic hydrolysis efficiently delivered I in good overall yields and in excellent purity.

REFERENCE COUNT: 41

REFERENCE(S): (1) Basak, A; Int J Peptide Protein Res 1994, V44, P253 CAPLUS  
(2) Brown, A; J Am Chem Soc 1997, V119, P3288 CAPLUS  
(3) Coffen, D; Med Chem Res 1998, V8, P206 CAPLUS  
(5) Fehrentz, J; J Org Chem 1997, V62, P6792 CAPLUS  
(6) Fehrentz, J; Tetrahedron Lett 1995, V36, P7871 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:524518 CAPLUS

DOCUMENT NUMBER: 131:286816

TITLE: Solid phase synthesis of peptide C-terminal **semicarbazones** and aldehydes

AUTHOR(S): Patterson, Jennifer A.; Ramage, Robert

CORPORATE SOURCE: The Edinburgh Centre For Protein Technology,  
Department of Chemistry, The University of Edinburgh,  
Edinburgh, EH9 3JJ, UK

SOURCE: Tetrahedron Lett. (1999), 40(33), 6121-6124

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:286816

AB A new linker based on the dibenzosuberyl system was developed in order to synthesize peptide C-terminal **semicarbazones** which can be readily converted into peptide C-terminal aldehydes. The method uses Fmoc-methodol. and proceeds with no loss of stereochem. integrity.

REFERENCE COUNT: 24

REFERENCE(S): (1) Bajusz, S; J Med Chem 1990, V33, P1729 CAPLUS  
(2) Basak, A; Int J Peptide Protein Res 1994, V44, P253 CAPLUS  
(3) Chapman, K; Bioorg Med Chem Lett 1992, V2, P613 CAPLUS  
(4) Ede, N; Tetrahedron Lett 1997, V38, P7119 CAPLUS  
(5) Fehrentz, J; FEBS Lett 1984, V167, P273 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:394349 CAPLUS

DOCUMENT NUMBER: 129:54608

TITLE: Inhibitors of interleukin-1.beta. converting enzyme

INVENTOR(S): Golec, Julian M. C.; Lauffer, David J.; Livingston, David J.; Mullican, Michael D.; Murcko, Mark A.; Nyce, Philip L.; Robidoux, Andrea L. C.; Wannamaker, Marion W.

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA; Golec, Julian M. C.; Lauffer, David J.; Livingston, David J.; Mullican, Michael D.; Murcko, Mark A.; Nyce, Philip L.; Robidoux, Andrea L. C.; Wannamaker, Marion W.

SOURCE: PCT Int. Appl., 135 pp.

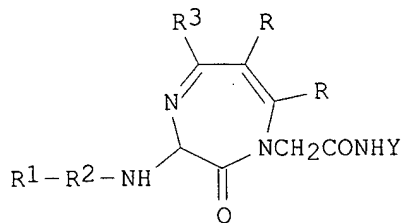
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9824805	A1	19980611	WO 1997-US22289	19971205
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9858960	A1	19980629	AU 1998-58960	19971205
EP 944645	A1	19990929	EP 1997-954531	19971205
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1996-32792	19961206
			US 1997-42660	19970404
			US 1997-53001	19970626
			WO 1997-US22289	19971205
OTHER SOURCE(S):			MARPAT 129:54608	
GI				



AB The present invention relates to novel classes of compds. I [RC:CR is an optionally substituted aryl or heteroaryl ring; R1 = aryl, heteroaryl, alkylaryl, alkylheteroaryl; R2 = bond, CO, COCO, SO2, OCO, NHCO, NHSO2, NHCOCO, CH:CHCO, OCH2CO, NHCH2CO, etc.; R3 = aryl, heteroaryl, cycloalkyl, alkyl, dialkylamino; Y = R5CO(CH2)mCH2CH(COR6) or related lactones or **semicarbazones**, where R5 = OH, alkoxy, NHOH, etc.; R6 = H, HOCH2, aroyloxymethyl, etc.; m = 0 or 1] which were prepd. as inhibitors of interleukin-1.β. converting enzyme. (ICE). Thus, (3S)-3-[3(R,S)-[(benzyloxycarbonyl)amino]-1,3-dihydro-2-oxo-5-phenyl-2H-1,4-benzodiazepin-1-acetylamino]-4-oxobutyric acid, prepd. from 3(R,S)-[(benzyloxycarbonyl)amino]-1,3-dihydro-2-oxo-5-phenyl-2H-1,4-benzodiazepin-1-acetic acid and (3S)-3-(1-fluorenylmethoxycarbonylamino)-4-oxobutyric acid tert-Bu ester **semicarbazone**, showed ICE inhibition const. Ki = 650 nM and IC50 = 20,000 nM.

L7 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:574514 CAPLUS

DOCUMENT NUMBER: 127:220992

TITLE: Preparation of methionine sulfone and S-substituted cysteine sulfone derivatives as thrombin or factor Xa inhibitors

INVENTOR(S): Abelman, Matthew Mark; Ardecky, Robert John; Nutt, Ruth Foelsche

PATENT ASSIGNEE(S): Corvas International Inc., USA

SOURCE: U.S., 88 pp. Cont.-in-part of U.S. Ser. No. 234,811, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5658939	A	19970819	US 1995-423584	19950418
US 5776927	A	19980707	US 1994-229298	19940418
US 5681844	A	19971028	US 1994-234811	19940428
US 5770600	A	19980623	US 1995-473647	19950606
PRIORITY APPLN. INFO.:			US 1994-229298	19940418
			US 1994-234811	19940428
			US 1995-423584	19950418

OTHER SOURCE(S): MARPAT 127:220992  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [ R1 = alkyl, alkenyl, (substituted) aryl, heterocyclyl such as indole, etc.; X = CO, O2C, NHCO, SO2, O3S, NHSO2, etc.; R2 = CH2S(O)q(CH2)mZ where q = 0-2, m = 1-6 and Z = H, (substituted) CO2H, (substituted) CONH2; Y = (CH2)n where n = 1-3] were prepd. as thrombin or factor Xa inhibitors. Methionine sulfone II was prepd. from the **resin-bound semicarbazone III** (R = MBHA **resin**); III was coupled with Boc-Pro-OH and N-cyclohexylmethanesulfonyl-L-methionine sulfone, successively, followed by cleavage of the protected **semicarbazone** from the **resin** and hydrolysis of the **semicarbazone** to give II. II exhibited IC50 values of 0.00066 and 0.030 .mu.M against thrombin and plasmin, resp.

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FILE 'CAPLUS, CAOLD' ENTERED AT 14:25:23 ON 24 JAN 2001

L1 512 S MURPHY A?/AU  
L2 6 S L1 AND "RESIN?"  
L3 1 S L1 AND "SEMICARBAZONE?"  
L4 1 S L2 AND L3  
L5 3558 S "SEMICARBAZONE?"  
L6 45 S L5 AND "RESIN?"  
L7 45 DUP REM L6 (0 DUPLICATES REMOVED)

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L6 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:130466 CAPLUS

DOCUMENT NUMBER: -126:172246

TITLE: Spectral characteristics and analytical applications of polymer-metal complexes derived from poly(salicylaldehyde acrylate)-divinylbenzene **semicarbazone resins**

AUTHOR(S): Prabhakar, L. D.; Marysaral, A.

CORPORATE SOURCE: Dep. Chem., Annamalai Univ., Annamalai Nagar, 608 002, India

SOURCE: Polym. Int. (1997), 42(2), 149-156  
CODEN: PLYIEI; ISSN: 0959-8103

PUBLISHER: Wiley  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Salicylaldehyde acrylate was prepd. and subjected to suspension polymn. with divinylbenzene as a crosslinking agent. The resulting network polymer was ligated with **semicarbazone**. The ligated polymer was treated with transition metal ions (Cu<sup>2+</sup>, Ni<sup>2+</sup>). The polymer-metal complexes were characterized by Fourier transform IR, <sup>13</sup>C and <sup>1</sup>H NMR, <sup>13</sup>C cross-polymn. magic-angle spinning NMR, magnetic studies, ESR spectroscopy, optical microscopy and SEM. Metal uptake efficiency, reusability of the purified ligated polymer, and catalytic effects of this **resin** on simple ester hydrolysis were also studied.

L6 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:387213 CAPLUS  
DOCUMENT NUMBER: 125:115912  
TITLE: Polymaleimide ion exchange **resin**  
AUTHOR(S): Patel, U. I.; Parmer, J. S.  
CORPORATE SOURCE: Dep. Chem., Sardar Patel Univ., Vidyanagar, 388 120, India  
SOURCE: Int. J. Polym. Mater. (1996), 33(1-2), 115-120  
CODEN: IJPMCS; ISSN: 0091-4037  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB New maleimide derivs., N-(3-hydroxy-4-acetothiosemicarbazonephenyl)maleimide and N-(3-hydroxy-4-acetosemicarbazonephenyl)maleimide were prepd. by condensation of N-(3-hydroxy-4-acetyl phenyl)maleimide with thiosemicarbazide and semicarbazide hydrochloride, resp. These were homopolymd. and copolymd. with styrene and maleic anhydride to give chelating ion exchange **resins**. They were analyzed by elemental anal., IR spectral study, TGA, DSC, and mol. wt. measurements.

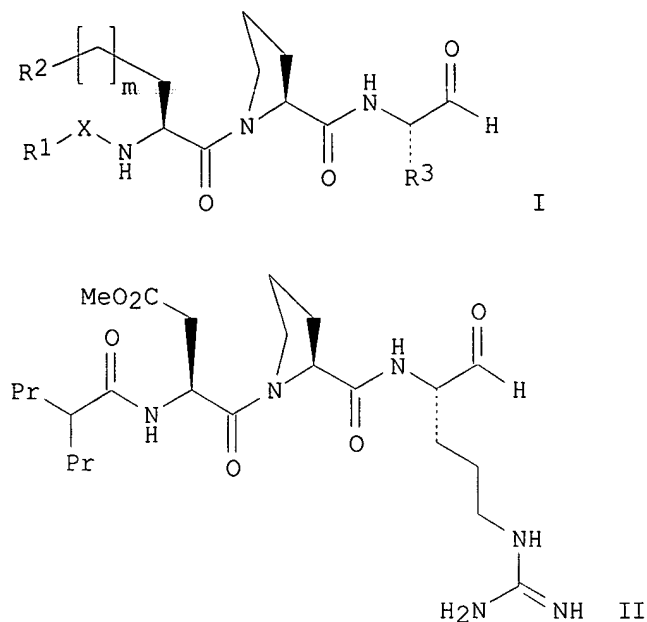
L6 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:184268 CAPLUS  
DOCUMENT NUMBER: 124:344120  
TITLE: Preparation of peptide aldehyde analogs as inhibitors of thrombosis  
INVENTOR(S): Vlasuk, George P.; Webb, Thomas R.; Pearson, Daniel A.; Abelman, Matthew M.  
PATENT ASSIGNEE(S): Corvas International, Inc., USA  
SOURCE: U.S., 49 pp., Cont.-in-part of U.S. Ser. No. 17,125, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5492895	A	19960220	US 1994-195995	19940211
CA 2155931	AA	19940818	CA 1994-2155931	19940214
WO 9417817	A1	19940818	WO 1994-US1612	19940214
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 684830	A1	19951206	EP 1994-909628	19940214
EP 684830	B1	19990616		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08508716	T2	19960917	JP 1994-517424	19940214
AT 181334	E	19990715	AT 1994-909628	19940214
US 5886146	A	19990323	US 1995-459705	19950602
US 5955576	A	19990921	US 1995-484269	19950607
PRIORITY APPLN. INFO.:			US 1992-836123	19920214
			US 1993-17125	19930212

OTHER SOURCE(S):  
GI

MARPAT 124:344120



AB This invention provides peptide aldehyde analogs that inhibit thrombin and/or Factor Xa, and which are thought useful for preventing or treating conditions in mammals characterized by abnormal thrombosis. The compds. are described by structure I [R1 = alkyl, cycloalkylalkyl, alkenyl, (un)substituted aryl, aralkyl, or aralkenyl, perfluoroalkyl, camphoryl, etc.; X = CO, OCO, SO2, NHSO2, OSO2; m = 1, 2; R2 = CO2H, CO2R', 5-tetrazolyl; R' = alkyl, aryl, aralkyl; R3 = (CH2)3NHC(:NH)NH2] and their pharmaceutically acceptable salts.. For example, Boc-Asp(OCH2Ph)-OH underwent a sequence of transesterification, coupling with H-Pro-OCH2Ph, removal of the Boc group, amidation with Pr2CHCOCl, hydrogenolysis, coupling with a **semicarbazone**- and nitro-protected L-argininal deriv., and deprotection, to give title compd. II. The IC50 values of II for inhibition of thrombin, Factor Xa, and plasmin in vitro were 0.80, 301, and 261 nm, vs. 3.6, 5300, and 144 nm for the known aldehyde analog Boc-D-Phe-Pro-Arg-H.

L6 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1995:710866 CAPLUS

DOCUMENT NUMBER:

123:113598

TITLE:

Synthesis and characterization of nickel(II), cobalt(II) and copper(II) complexes of poly(salicylaldehyde-acrylate)divinylbenzene resins

AUTHOR(S):

Prabhakar, L. D.; Umarani, C.

CORPORATE SOURCE:

Dep. Chem., Annamalai Univ., Annamalainagar, 608 002, India

SOURCE:

Indian J. Chem., Sect. A: Inorg., Bio-inorg., Phys., Theor. Anal. Chem. (1995), 34A(8), 621-4  
CODEN: ICACEC; ISSN: 0376-4710

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The polymeric chelates of Ni(II), Co(II) and Cu(II) have been prep'd. from poly(salicyl aldehyde acrylate) crosslinked with divinylbenzene derivatized with oxime, **semicarbazone**, thiosemicarbazone ethylenediamine and Schiff's base. The spectra (IR, 1H, 13C and solid state 13C-CP/MAS NMR) and applications of the coordination polymers have been studied.

L6 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:621577 CAPLUS  
DOCUMENT NUMBER: 123:45643  
TITLE: Preparation of printed circuits  
INVENTOR(S): Capote, Miguel A.; Todd, Michael G.; Manesis, Nicholas J.; Craig, Hugh P.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S., 18 pp. Contg. in-part of U.S. Ser. No 477,678, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5376403	A	19941227	US 1991-769892	19911001
WO 9306943	A1	19930415	WO 1992-US8333	19921001
W: AU, BG, BR, CA, CS, FI, HU, JP, KR, NO, PL, RO, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
AU 9227678	A1	19930503	AU 1992-27678	19921001
AU 663342	B2	19951005		
JP 07502369	T2	19950309	JP 1992-507034	19921001
JP 2972338	B2	19991108		
EP 646048	A1	19950405	EP 1992-921540	19921001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
US 5538789	A	19960723	US 1994-188658	19940126
KR 9710170	B1	19970621	KR 1994-71007	19940329
US 5830389	A	19981103	US 1994-324060	19941017
US 5565267	A	19961015	US 1995-478453	19950607
US 5716663	A	19980210	US 1995-483079	19950607
US 5853622	A	19981229	US 1996-704467	19960828
US 5948533	A	19990907	US 1997-813809	19970306
PRIORITY APPLN. INFO.:			US 1990-477678	19900209
			US 1991-769892	19911001
			US 1992-903042	19920623
			WO 1992-US8333	19921001
			US 1994-188658	19940126
			US 1994-324060	19941017
			US 1995-483079	19950607

AB A solder powder, a chem. protected crosslinking agent with fluxing properties, and a reactive monomer or polymer are the principal components of a conductive ink compn. for printed circuits. Depending on the intended end use, the compns. comprise .gtoreq.3 of the following: a relatively high-melting metal powder; solder powder; an active crosslinking agent which also serves as a fluxing agent; a **resin**; and a reactive monomer or polymer. The compns. are useful as improved conductive adhesives, such as for attaching elec. components to elec. circuits: the compns. comprising metal powder are ideally suited for creating the conductive paths on printed circuits. The compns. for forming conductive paths may 1st be applied to a substrate in the desired pattern, and then heated to cure it. During heating, the action of the crosslinking agent and optional reactive monomer or polymer within the mixt. fluxes the metals, enabling sintering to occur between the metal powder and the solder powder.

L6 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1995:216685 CAPLUS  
 DOCUMENT NUMBER: 122:133851  
 TITLE: Preparation of peptidealdehydes as specific inhibitors  
 of factor Xa.  
 INVENTOR(S): Brunck, Terence Kevin; Webb, Thomas Roy; Ripka,  
 William Charles  
 PATENT ASSIGNEE(S): Corvas International, Inc., USA  
 SOURCE: PCT Int. Appl., 84 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9413693	A1	19940623	WO 1993-US12255	19931215
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2151044	AA	19940623	CA 1993-2151044	19931215
EP 675899	A1	19951011	EP 1994-904466	19931215
EP 675899	B1	19990317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 177752	E	19990415	AT 1994-904466	19931215
PRIORITY APPLN. INFO.:			US 1992-991204	19921215
			WO 1993-US12255	19931215
OTHER SOURCE(S):		MARPAT 122:133851		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Peptide aldehydes having MW .ltoreq.1000 which selectively inhibit factor Xa but which do not appreciably inhibit factor XIa, thrombin, or tissue plasminogen activator, specifically [I and II; R1 = (CH2)3NHC(:NH)NH2 and mono- and disubstituted alkyl derivs. thereof; R2 = (alkyl-substituted) aralkyl; R3 = alkyl, (alkyl-substituted) aryl, aralkyl; R4 = alkyl, alkenyl, aryl, aralkyl, alkoxy, alkenyloxy, aryloxy, aralkoxy, carboxyalkyl], were prepd. Thus, title compd. III, prepd. by solid phase synthesis on a **semicarbazone** solid support, inhibited factor Xa, XIa, thrombin, and tissue plasminogen activator with IC50 = 0.023, 20, >25, and >25 .mu.M, resp.

L6 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1995:14840 CAPLUS  
 DOCUMENT NUMBER: 122:32725  
 TITLE: Thermal behavior of the **resin** copolymers  
 derived from hydroxy aromatic compounds  
 AUTHOR(S): Lenka, S.; Das, S.C.; Mohapatra, N.K.; Nayak, P.L.  
 CORPORATE SOURCE: Dep. Chem., Ravenshaw Coll., Cuttak, India  
 SOURCE: Polym. Sci. (1994), Volume 2, 786-92. Editor(s):  
 Bhardwaj, I. S. -Allied Publ.: New Delhi, -India.  
 CODEN: 60AIA Y  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB A large no. of **resin** copolymers prepd. by condensing 2-hydroxy,  
 2,4-dihydroxy acetophenone and 2,4-dinitrophenyl hydrazone,  
 semi-carbazone, thiosemicarbazone derivs. of hydroxy acetophenones with  
 arom. hydroxy compds. and formaldehyde/furfural in the presence of acids  
 and bases as the catalysts was characterized. The IR and NMR spectra of  
 the **resins** were taken to study the structural repeat units of



the **resin** copolymers. The thermogravimetric anal. of the **resins** were carried out. The values of the energy of the activation of the degrdn. of the **resins** were computed by using different kinetic equations. The kinetic parameters for the degrdn. mechanism of the **resins** have also been evaluated by using a novel Lotus package computer anal. method.

L6 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:681987 CAPLUS  
DOCUMENT NUMBER: 121:281987  
TITLE: Synthetic **resins** XXV: Chelating ion-exchange properties of **resins** derived from **semicarbazone** of 4-hydroxy acetophenone-substituted benzoic acid-formaldehyde  
AUTHOR(S): Bastia, T.K.; Lenka, S.; Nayak, P.L.  
CORPORATE SOURCE: Dep. Chem., Ravenshaw Coll., Cuttack, 753 003, India  
SOURCE: Macromol. Rep. (1994), A31(Suppl. 1-2), 53-61  
CODEN: MREPEG  
DOCUMENT TYPE: Journal  
LANGUAGE: English

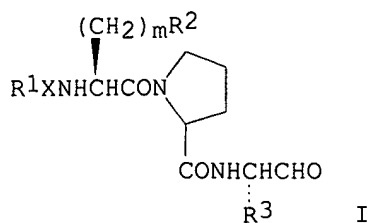
AB **Resins** were synthesized by reacting p-hydroxyacetophenone **semicarbazone** with substituted benzoic acid and formaldehyde. Acid catalysts (H<sub>2</sub>SO<sub>4</sub>, HCl and succinic acid) and basic catalysts (NaOH and KOH) were used. The ion-exchange capacity of the acid form of the **resins** was studied by measuring metal uptake from various electrolyte solns. with the **resin** in suspension. The effect of electrolyte compn. and pH on metal uptake of Cu<sup>2+</sup>, Ni<sup>2+</sup>, Zn<sup>2+</sup>, Mg<sup>2+</sup>, Mn<sup>2+</sup> and Co<sup>2+</sup> was detd.

L6 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:622004 CAPLUS  
DOCUMENT NUMBER: 121:222004  
TITLE: Peptide aldehyde analogs as inhibitors of thrombosis  
INVENTOR(S): Vlasuk, George Phillip; Webb, Thomas Roy; Pearson, Daniel Andrew; Abelman, Matthew Mark  
PATENT ASSIGNEE(S): Corvas International, Inc., USA  
SOURCE: PCT Int. Appl., 144 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9417817	A1	19940818	WO 1994-US1612	19940214
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5492895	A	19960220	US 1994-195995	19940211
EP 684830	A1	19951206	EP 1994-909628	19940214
EP 684830	B1	19990616		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08508716	T2	19960917	JP 1994-517424	19940214
PRIORITY APPLN. INFO.:				
			US 1993-17125	19930212
			US 1994-195995	19940211
			US 1992-836123	19920214
			WO 1994-US1612	19940214

OTHER SOURCE(S): MARPAT 121:222004  
GI



AB Peptide aldehyde analogs I [R1 = alkyl, alkenyl, aryl, aralkyl, aralkenyl, perfluoroalkyl, trimethylsilylalkyl, etc.; X = CO, O2C, SO2, NHSO2, OSO2; R2 = CO2R', tetrazolyl; R' = alkyl, aryl, aralkyl; R3 = (CH2)3NHC(:NH)NH2; m = 1, 2] that inhibit thrombin or Factor Xa are proposed for preventing or treating conditions in mammals characterized by abnormal thrombosis. Thus, N-(3-phenylpropionyl)-L-aspartyl-L-prolyl-L-argininal (II) (50 or 100 .mu.g/kg/min i.v.) inhibited FeCl3-induced platelet-dependent arterial thrombosis in rats. II was synthesized by attachment of N-Boc-L-proline to a NG-nitroargininal **semicarbazone**-derivatized **resin**, followed by attachment of N-Boc-L-aspartic acid .beta.-benzyl ester, deprotection, and coupling to 3-phenylpropionic acid.

L6 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:606648 CAPLUS

DOCUMENT NUMBER: 121:206648

TITLE: Synthetic **resins**. Part 31. Thermal properties of **resin** copolymers derived from **semicarbazone** of 4-hydroxyacetophenone-furfural-substituted benzoic acids

AUTHOR(S): Mohapatra, N. K.; Lenka, S.; Nayak, P. L.

CORPORATE SOURCE: Laboratory of Polymers and Fibers, Department of Chemistry, Ravenshaw College, Cuttack-753003, Orissa, India

SOURCE: Thermochim. Acta (1994), 241(1-2), 51-6  
CODEN: THACAS; ISSN: 0040-6031

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Phenolic **resins** are obtained from the **semicarbazone** deriv. of 4-hydroxyacetophenone, furfural, and substituted benzoic acids in the presence of an acid catalyst. The structure of the repeat units of the copolymer are ascertained from the IR spectra. The TGA of some copolymers is studied. The kinetic parameters of the thermal degrdn. are evaluated using five different methods. A degrdn. mechanism is suggested.

L6 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:580233 CAPLUS

DOCUMENT NUMBER: 121:180233

TITLE: Reagents for automated synthesis of peptide aldehydes.

INVENTOR(S): Webb, Thomas R.

PATENT ASSIGNEE(S): Corvas, Inc., USA

SOURCE: U.S., 18 pp.  
CODEN: USXXAM

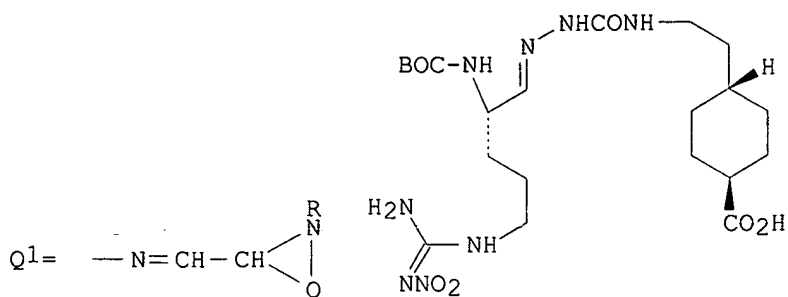
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5283293	A	19940201	US 1990-627753	19901214
US 5367072	A	19941122	US 1991-807474	19911213
PRIORITY APPLN. INFO.:			US 1990-627753	19901214
OTHER SOURCE(S):		MARPAT 121:180233		



AB XCOANHCONH2 [A = hydrocarbyl; Z = NHR, N:CHCHR1NHR, Q1; R = protecting group; R1 = H, (substituted) alkyl, cycloalkyl, aryl, aralkyl; Q = (substituted) alkylene; X = NHSp, OSp, CH2Sp; Sp = insol. **resin** support], were prepd. Thus, nitroarginal **semicarbazone** deriv I was prepd. and coupled to methylbenzhydrylamine **resin**; the **resin** was used in solid phase prepn. of BOC-D-Leu-Pro-Arginal, etc.

L6 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:135141 CAPLUS

DOCUMENT NUMBER: 120:135141

TITLE: Preparation of **semicarbazone** and semicarbazide amino acid aldehyde supports for automated synthesis of peptide analogs

INVENTOR(S): Webb, Thomas Roy

PATENT ASSIGNEE(S): Corvas International Inc., USA

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

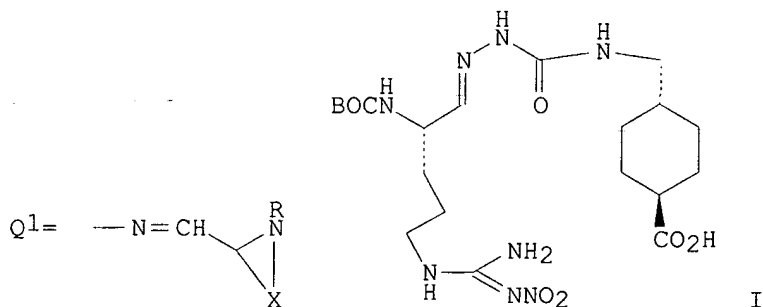
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9312076	A1	19930624	WO 1991-US9388	19911213
W: AU, CA, FI, JP, KR, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9213390	A1	19930719	AU 1992-13390	19911213
PRIORITY APPLN. INFO.:			WO 1991-US9388	19911213
OTHER SOURCE(S):		MARPAT 120:135141		

GI



AB HO2CACH2NHCONHZ [A = C2-15 hydrocarbylene; Z = NHR, N:CHCHR1NHR, Q1; R = protecting group; R1 = H, (substituted) alkyl, cycloalkyl, aryl, aralkyl; X = (substituted) C3-12 alkylene], were prepd. Thus, trans-4-aminomethylcyclohexanecarboxylic acid was elaborated to **semicarbazone** deriv I in several steps. This was coupled to methylbenzhydramine **resin** using N-methylmorpholine/BOP reagent in DMF and the resulting SAAA (**semicarbazone** amino acid aldehyde) support was used to prep. BOC-D-Leu-Pro-Arg-H, BOC-D-Phe-Pro-Arg-H, etc.

L6 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1993:659616 CAPLUS  
DOCUMENT NUMBER: 119:259616  
TITLE: Reversible thermal recording materials providing stable transparent state in wider range of temperature  
INVENTOR(S): Azuma, Hiroshi  
PATENT ASSIGNEE(S): Mitsubishi Plastics Ind, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 05193270	A2	19930803	JP 1992-7998	19920121

AB The title materials comprising org. low-mol.-wt. substances dispersed in a **resin**, the transparency of which changes reversibly with temp., employ .gtoreq.1 compd. selected from C.gtoeq.10 alicyclic ketones and oximes and **semicarbazones** derived from them and .gtoreq.1 C.gtoeq.12 aliph. satd. dicarboxylic acid as the org. substances. The materials become transparent in a wide range of temp. Thus, a PET substrate with a magnetic recording layer on the back side was coated with a compn. contg. MRP-TS (vinyl chloride-vinyl acetate copolymer), cycloeicosane, and 1,14-tetradecanedioic acid and laminated with a PET film to give a reversible thermal recording card.

L6 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1993:116241 CAPLUS  
DOCUMENT NUMBER: 118:116241  
TITLE: Biomedical Polymers. IV. Bactericidal property of the **resins** derived from **semicarbazones** and 2,4-dinitrophenylhydrazones of some hydroxyacetophenones  
AUTHOR(S): Bastia, T. K.; Senapati, M.; Nayak, P. L.  
CORPORATE SOURCE: Dep. Chem., S.S.D. Coll., Cuttack, 754029, India  
SOURCE: J. Appl. Polym. Sci. (1992), 46(10), 1875-7  
CODEN: JAPNAB; ISSN: 0021-8995  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Phenols have been extensively studied for their antimicrobial activities and found to be effective eradicanats. The present study reports the bactericidal properties of the **resins** derived from hydroxyacetophenone **semicarbazones** and 2,4-dinitrophenylhydrazones. Resacetophenone **semicarbazone** -p-aminobenzoic acid-HCHO copolymer was the most active of all the copolymers tested, showing toxicity to Klebsiella, Staphylococcus citreus, and Proteus at 5% concns.

L6 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1992:652705 CAPLUS  
DOCUMENT NUMBER: 117:252705

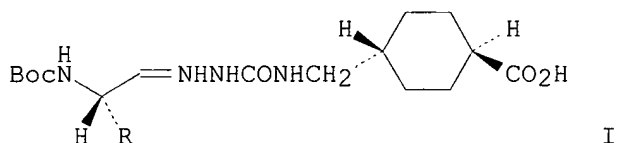
TITLE: Synthetic **resins**. XX. Chelation  
ion-exchange properties of **resins** derived  
from **semicarbazone** of 2-hydroxyacetophenone-  
substituted benzoic acid-formaldehyde  
AUTHOR(S): Bastia, T. K.; Lenka, S.; Nayak, P. L.  
CORPORATE SOURCE: Dep. Chem., Ravenshaw Coll., Cuttack, 753 003, India  
SOURCE: J. Appl. Polym. Sci. (1992), 46(4), 739-44  
CODEN: JAPNAB; ISSN: 0021-8995

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A no. of **resins** were synthesized by reacting  
o-hydroxyacetophenone **semicarbazone** with substituted BzOH and  
HCHO in the presence of some acid and basic catalysts. The physicochem.  
properties of the **resins** were reported. The ion exchange  
properties of the **resins** were investigated. Influence of  
electrolytes on the metal uptake of Cu<sup>2+</sup>, Ni<sup>2+</sup>, Zn<sup>2+</sup>, Mg<sup>2+</sup>, and Mn<sup>2+</sup> was  
studied. The distribution of metal ions at different pH was also  
reported.

L6 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1992:194851 CAPLUS  
DOCUMENT NUMBER: 116:194851  
TITLE: Automated synthesis of peptide C-terminal aldehydes  
AUTHOR(S): Murphy, Aileen M.; Dagnino, Raymond, Jr.; Vallar,  
Pureza L.; Trippe, Anthony J.; Sherman, Shannon L.;  
Lumpkin, Richard H.; Tamura, Susan Y.; Webb, Thomas R.  
CORPORATE SOURCE: Corvas Int. Inc., San Diego, CA, 92121, USA  
SOURCE: J. Am. Chem. Soc. (1992), 114(8), 3156-7  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB The title compds., e.g. Boc-D-Leu-X-Arg-H (Boc = Me<sub>3</sub>CO<sub>2</sub>C; X = Pro, Ser)  
and Boc-Ala-Ala-Pro-X<sub>1</sub>-H (X<sub>1</sub> = Ala, Val, Phe) were prepd. by the solid  
phase method using linkers I [R = (protected) amino acid side chain].  
Peptides are assembled using std. Boc protocols, and cleaved from the  
**resin** with dil. aq. acid/formaldehyde to give protected peptide  
C-terminal aldehydes. Argininal-contg. peptide aldehydes with various  
hydrogen/Pd labile protecting groups can be deprotected in a single step  
to give the unprotected peptide aldehydes after purifn. by reverse-phase  
HPLC.

L6 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1991:63786 CAPLUS  
DOCUMENT NUMBER: 114:63786  
TITLE: Adhesive compositions  
INVENTOR(S): Kroyan, S. A.; Karapetyan, A. N.; Beglaryan, A. A.;  
Naujokajtiene, D.; Epishkin, Yu. S.; Jasinavicius, R.  
PATENT ASSIGNEE(S): USSR  
SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1990, (24), 92.  
CODEN: URXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Russian  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1574618	A1	19900630	SU 1988-4485035	19880704

AB An adhesive compn. contg. dian epoxy **resin**, dicyandiamide (I), and solvent has increased strength of bonding permalloy units of cores of Sendust magnetic heads and shortened hardening period by adding N,N-dimethyl-N'-(3-trifluoromethylphenyl)urea (II) and **semicarbazone** 5-nitrofurfural (III). Thus, a compn. contained dian epoxy **resin** 19.5-35.1, I 1.2-5.5, II 0.3-0.8, III 0.1-0.5, and solvent 58.1-78.9%.

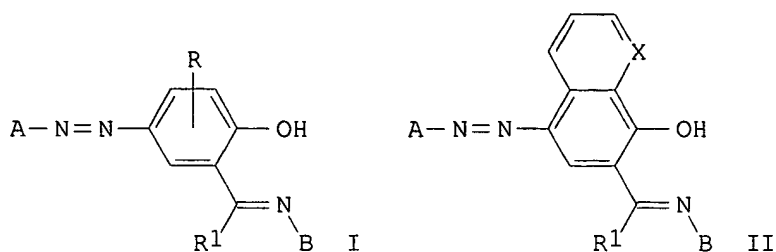
L6 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1988:93803 CAPLUS  
 DOCUMENT NUMBER: 108:93803  
 TITLE: A simple, efficient, and highly selective method for the regeneration of carbonyl compounds from oximes and **semicarbazones**  
 AUTHOR(S): Ranu, Brindaban C.; Sarkar, Dipak C.  
 CORPORATE SOURCE: Dep. Org. Chem., Indian Assoc. Cultiv. Sci., Calcutta, 700 032, India  
 SOURCE: J. Org. Chem. (1988), 53(4), 878-9  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:93803

AB Cation exchange **resin** Dowex-50 is an effective reagent for the title regeneration of carbonyl compds. The method involved heating the oxime or **semicarbazone** at reflux with stirring in an aq. suspension at Dowex-50. The procedure shows a considerable selectivity for the regeneration of ketones over aldehydes.

L6 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1986:610401 CAPLUS  
 DOCUMENT NUMBER: 105:210401  
 TITLE: Metal complexes and their use in dyeing high-molecular-weight organic materials  
 INVENTOR(S): Cseh, Georg; Lienhard, Paul  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz.  
 SOURCE: Eur. Pat. Appl., 40 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 168343	A2	19860115	EP 1985-810270	19850610
EP 168343	A3	19881019		
EP 168343	B1	19910502		
R: CH, DE, FR, GB, IT, LI				
US 4670486	A	19870602	US 1985-745034	19850613
JP 61012756	A2	19860121	JP 1985-130651	19850615
US 4775747	A	19881004	US 1987-15815	19870217
PRIORITY APPLN. INFO.:			CH 1984-2915	19840615
			US 1985-745034	19850613

GI



AB Divalent transition metal complexes of I and II [A = arom. residue; B = H, C1-4 alkyl, NHCONH<sub>2</sub>, NHCONHR<sub>2</sub>, NHCONHR<sub>3</sub>, NHCSNH<sub>2</sub>, NHCONHR<sub>3</sub>, NHCSR<sub>3</sub>, NHC(:NH)NH<sub>2</sub>, NHR<sub>3</sub>, NHCOR<sub>3</sub>, NHSO<sub>2</sub>R<sub>3</sub>, or a heterocyclic arom. residue; R = H, halogen, C1-4 alkyl, C1-4 alkoxy; R<sub>1</sub> = H, C1-4 alkyl, (un)substituted aryl; R<sub>2</sub> = C1-4 alkyl; R<sub>3</sub> = (un)substituted phenyl; X = CH, N] are useful in dyeing polymers such as nitrocellulose, alkyd, melamine, formaldehyde-urea, and acrylic **resins**. Thus, 5-(2,5-dichlorophenylazo)-2-hydroxybenzaldehyde **semicarbazone** was dissolved in Et Cellosolve and treated with Cu(OAc)<sub>2</sub>, forming a 1:1 Cu complex of I (A = 2,5-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, B = NHCONH<sub>2</sub>, R = R<sub>1</sub> = H).

L6 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1984:47542 CAPLUS  
DOCUMENT NUMBER: 100:47542  
TITLE: Transition-state affinity chromatography of trypsin-like proteinases with dipeptidyl argininal ligands  
AUTHOR(S): Patel, Arun H.; Ahsan, Ahmad; Suthar, B. P.; Schultz, Richard M.  
CORPORATE SOURCE: Stritch Sch. Med., Loyola Univ. Chicago, Maywood, IL, 60153, USA  
SOURCE: Biochim. Biophys. Acta (1983), 748(2), 321-30  
CODEN: BBACAQ; ISSN: 0006-3002  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Dipeptidyl argininal (arginine aldehyde) affinity **resins** of general formula R-(X-Y-argininal) (where R = **resin** matrix and X, Y = amino acids of varied structure) are synthesized in a solid-phase procedure in which the dipeptide (-X-Y-) is 1st attached to the **resin**, followed by the joining of the Y amino acid to argininal **semicarbazone**, and decompn. of the **semicarbazone** in a MeOH/HOAc/HCHO reagent. An R-(Gly-Gly-argininal) **resin** binds urokinase tightly, but does not bind thrombin. However, thrombin binds strongly to R-(Phe-Pro-argininal), whereas urokinase does not bind. Accordingly, the X-Y-argininal ligands selectively bind proteinases of identical primary binding site specificity to arginine, but different secondary site specificity in -X-Y-. The selectivity is due to an amplification of peptide binding specificity caused by the transition-state analog properties of the ligands. Whereas the affinity consts. between peptide aldehyde and proteinase approach those of antibody-antigen interactions, the elution with semicarbazide (aldehyde-trapping reagent) buffers easily remove tightly bound proteinases without proteinase inhibitors or denaturation. Conditions for the binding and elution of proteinases, methods of regeneration, and other characteristics of the **resins** are described.

L6 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1983:486778 CAPLUS  
DOCUMENT NUMBER: 99:86778  
TITLE: Identification of betanin degradation products  
AUTHOR(S): Schwartz, Steven J.; Von Elbe, Joachim H.  
CORPORATE SOURCE: Dep. Food Sci., Univ. Wisconsin, Madison, WI, 53706,

USA  
SOURCE: Z. Lebensm.-Unters. Forsch. (1983), 176(6), 448-53  
CODEN: ZLUFAR; ISSN: 0044-3026  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Betanin [7659-95-2] in soln., upon heating, was hydrolyzed to betalamic acid [18766-66-0] and cyclodopa-5-O-glycoside [71242-23-4]. This reaction was monitored by an anal. high performance liq. chromatog. (HPLC) method. The products were isolated by preparative reversed-phase HPLC or column chromatog. using anion-exchange **resins**. Derivs. of betalamic acid (anilide, **semicarbazone**, condensation with L-proline) and cyclodopa-5-O-glycoside (hexaacetate) were prepd. as evidence to support the identification of these decompn. compds. Formation of decarboxylated betanin was proposed based on the identification of CO<sub>2</sub>, chromatog. properties, and the light absorption characteristics of the decarboxylated product.

L6 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1982:138603 CAPLUS  
DOCUMENT NUMBER: 96:138603  
TITLE: Transition-state affinity purification of proteases; the preparation of an argininal affinity **resin** for the selective binding of trypsin-like proteases  
AUTHOR(S): Patel, Arun H.; Schultz, Richard M.  
CORPORATE SOURCE: Stritch Sch. Med., Loyola Univ., Maywood, IL, 60153, USA  
SOURCE: Biochem. Biophys. Res. Commun. (1982), 104(1), 181-6  
CODEN: BBRCA9; ISSN: 0006-291X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB An affinity **resin** contg. argininal ligands is synthesized for the purifn. of proteases with trypsin-like specificity. The synthesis of arginine **semicarbazone** (Argal-SC) from Cbz-(.omega.-nitro)-L-arginine, the joining of Argal-SC to an agarose matrix, and the removal of the **semicarbazone** function to form argininal is described. Argininal binds proteases by forming a hemiacetal with the serine nucleophile of the protease with high specificity due to the transition-state like features of the adduct. Thus, the **resin** binds trypsin more strongly than **resins** that only assoc. by noncovalent interactions. The trypsin is eluted in quant. yield by a semicarbazide contg. buffer.

L6 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1980:508138 CAPLUS  
DOCUMENT NUMBER: 93:108138  
TITLE: Simultaneous determination of cycasin, methylazoxymethanol and formaldehyde by high performance liquid chromatography  
AUTHOR(S): Yagi, Fumio; Tadera, Kenjiro; Kobayashi, Akira  
CORPORATE SOURCE: Fac. Agric., Kagoshima Univ., Kagoshima, 890, Japan  
SOURCE: Agric. Biol. Chem. (1980), 44(6), 1423-5  
CODEN: ABCHA6; ISSN: 0002-1369  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Cycasin (I) [14901-08-7], myethylazoxymethanol (II) [590-96-5], and HCHO [50-00-0] were detd. simultaneously in the cycad plant, Cycas revolute, by high-performance liq. chromatog. (HPLC). The .beta.-glucosidase present in the plant exts. was inactivated by 2 methods: (a) boiling in EtOH, or (b) freezing at less than -30.degree. prior to homogenization in cold EtOH. HPLC was performed on a 0.5 x 600 mm Teflon column packed with Shodex HC 125S **resin** (12.5 .mu.m). HCHO was detd. as its **semicarbazone** deriv. after dilg. the sample ext. with semicarbazide-HCl, and both I and II were detd. at their max. absorption wavelength of 215 nm. HPLC of seed kernel exts. obtained by the boiling



method showed good sepn. of I, II, and the **semicarbazone** of HCHO. When the ext. was treated with almond .beta.-glucosidase, I was hydrolyzed completely, and II and the **semicarbazone** of HCHO increased. The amts. of I obtained by the boiling method were lower than those obtained by freezing, due to incomplete inactivation of .beta.-glucosidase by boiling. Thus, freezing is the method of choice for inactivating .beta.-glucosidase prior to HPLC.

L6 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1970:111639 CAPLUS  
DOCUMENT NUMBER: 72:111639  
TITLE: Araucaria cunninghami diterpenes.  
AUTHOR(S): Caputo, Romualdo; Dovinola, V.; Mangoni, Lorenzo  
CORPORATE SOURCE: Ist. Chim. Org., Univ. Napoli, Naples, Italy  
SOURCE: Chim. Ind. (Milan) (1969), 51(12), 1383-4  
CODEN: CINMAB  
DOCUMENT TYPE: Journal  
LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

AB The following compds. were isolated from the *A. cunninghamii* **resin**: I (Arya, V. P., 1961), II (R = CO<sub>2</sub>H, R<sub>1</sub> = H) (Mangoni, L. and Belardini, M., 1964), 15-hydroxy-8,13-labdadien-19-oic acid (III, R = CO<sub>2</sub>H, R<sub>1</sub> = H), m. 124-5.degree., [.alpha.]D 128.degree., II (R = CO<sub>2</sub>H, R<sub>1</sub> = Ac), [.alpha.]D 49.degree., III (R = CO<sub>2</sub>H, R<sub>1</sub> = Ac), [.alpha.]D 109.degree., III (R = CH<sub>2</sub>OH, R<sub>1</sub> = H), m. 141-3.degree., [.alpha.]D 54.degree., III (R = CHO, R<sub>1</sub> = H), [.alpha.]D 68.degree., III (R = CHO, R<sub>1</sub> = Ac), [.alpha.]D 67.degree. (**semicarbazone** m. 126-8.degree. [.alpha.]D 58.degree.) and the mono and diacetate of III (R = CH<sub>2</sub>OH, R<sub>1</sub> = H), [.alpha.]D 51.degree., and [.alpha.]D 49.degree., resp. The treatment of III (R = CO<sub>2</sub>H, R<sub>1</sub> = H) with CH<sub>2</sub>N<sub>2</sub> gave III (R = CO<sub>2</sub>Me, R<sub>1</sub> = H), [.alpha.]D 124.degree., which upon catalytic hydrogenation gave a tetrahydro deriv., b. 160.degree., [.alpha.]D 50.degree.. NMR spectra are given.

L6 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1970:61441 CAPLUS  
DOCUMENT NUMBER: 72:61441  
TITLE: Photochromic imaging system  
INVENTOR(S): Amidon, Alan B.; Brynko, Carl  
PATENT ASSIGNEE(S): Xerox Corp.  
SOURCE: U.S., 6 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3482973	A	19691209	US 1965-491940	19651001
GB 1166240	A	19691008	GB 1966-1166240	19660927
PRIORITY APPLN. INFO.:			US 1965-491940	19651001

AB 6'-Nitro-1,3,3-tri-methylindolinobenzopyrlospiran 4 and Amberol ST-13 7X 8 g (an unreactive, unmodified phenol-formaldehyde **resin**) are dissolved in 88 g PhMe. This soln. is dip coated in the dark to a thickness of 2 .mu. on an Al plate and air dried. The plate is then contact exposed to an image transparency with a 9-W fluorescent light using a filter which passes about a 10 .ANG. bandwidth centered on 3660 .ANG.. A maroon colored image is formed. The film is then treated with xylene vapor to swell the image areas. On drying the exposed areas become fixed and the image areas are swollen about 1/3 above the thickness of the layers, giving a raised appearance of the image. Other spiropyrans may be used, as well as anthrones, syndones, anids hydrazones, osayone, **semicarbazones**, stilbene derivs. fulgides, amino-camphor compds.,

or thio indigo dyes.

L6 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1969:466059 CAPLUS  
DOCUMENT NUMBER: 71:66059  
TITLE: Photographic imaging by means of the surface tension  
created by photochromic materials  
INVENTOR(S): Amidon, Alan B.; Brynko, Carl  
PATENT ASSIGNEE(S): Xerox Corp.  
SOURCE: U.S., 7 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3450530	A	19690617	US 1965-484794	19650903

AB A photochromic compd. with a uniformly deformed light scattering surface is exposed to an image with actinic radiation. After imagewise conversion of at least a portion of the photochromic layer, it is exposed to heat, solvent vapor, or other softening influence and because of the marked differences in surface tension between the 2 states of the same photochromic compd., an image is formed. The photochromic compn. may be composed solely of .ltoreq.1 photochromic compd. providing that it has the strength and film forming ability and can hold the initial surface scattering pattern. However, it is usually dispersed or dissolved in solid soln. in a plastic **resin**. The light scattering surface deformation may include those caused by elec. field forces upon softening of the film known as frost or relief thermoplastic deformation imaging or blush imaging caused by phase sepn. during solvent coating of the film or can merely be pressed into the material surface with a die. Typical compds. are spiropyrans, anthrones, sydnones, hydrazones, osazones, **semicarbazones**, stilbene deriv., fulgides, amino-camphor compds., thioindigo dyes, and o-nitrobenzyl derivs. For example, 2 g. 6'-nitro-1,3,3-trimethyl-indolinobenzopyrylospiran and 4 g. of Stabelite Ester 10 **resin** are dissolved in 94 g. PhMe. This soln. is dip-coated in the dark to a thickness of 1 .mu. on an Al plate and air-dried, and is charged at 8500 v., pos. with respect to the Al base of the plate. The film is heated with a hot air gun, and a uniform fine grain frost deformation pattern appears on the surface. Upon cooling, this uniform thermoplastic deformation pattern is frozen in the film. The film is exposed to an image with a 9-w. Blacklite using a filter which passes about a 10-A. bandwidth centered on 3660 A. A maroon color image forms on the film. The film is exposed to xylene vapor which causes the frost deformation to disappear in the background film areas, reverting to its original smooth condition there while the frost pattern is retained in the exposed areas.

L6 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1969:422994 CAPLUS  
DOCUMENT NUMBER: 71:22994  
TITLE: N-3-Oxohydrocarbon-substituted acrylamide reaction  
products with compounds containing active hydrogen  
INVENTOR(S): Laudise, Michael A.; Coleman, Lester E.  
PATENT ASSIGNEE(S): Lubrizol Corp.  
SOURCE: Fr., 9 pp.  
CODEN: FRXXAK  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1540185		19680920		
PRIORITY APPLN. INFO.:			US	19661013
			US	19670807

AB N-(3-Oxohydrocarbon-substituted)acrylamides were prepd. and reacted with a polyamine or polyamide with terminal amino groups and the products were used in paints. The paints showed less yellowing and improved light stability. Thus, the oxime of diacetone acrylamide was prepd. by reaction of equimolar amts. of NH<sub>2</sub>OH and diacetone acrylamide (I). Similarly, reaction of I with H<sub>2</sub>NCONHNH<sub>2</sub>.HCl, NaHSO<sub>3</sub>, and BuNH<sub>2</sub> gave the **semicarbazone** of I, the bisulfite addn. product of I and diacetone acrylamide-n-butylamine, resp. To a soln. of 0.23 g. Na in 26 g. MeOH was added 68 g. I, the mixt. was stirred 90 hrs., 0.7 g. HOAc was added, the mixt. was filtered, and the filtrate was distd. The fraction b4.cntdot.5 120-50.degree. was redistd. to give N-(1,1-dimethyl-3-oxobutyl)-3-methoxypropionamide. Also prepd. were the addn. product of I and cellulose, S-[N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]thiuronium chloride (m. 146-9.degree.), N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl n-dodecyl sulfide (m. 53-6.degree.), the dithiophosphate of O,O'-di-iso-Pr S-[N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl], N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl tert-Bu sulfide (m. 76-8.degree.), N-[N'-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]piperidine, N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl-.beta.-naphthyl sulfide, N-[N'-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]morpholine, and N-[N'-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]-pyridinium chloride. I (169 g.) was heated at 66.degree. under N, 51.5 g. diethylenetriamine (II) was added dropwise, and the mixt. was heated for 1 hr. at 77.degree. to give a reaction product (III) of I and II. I was also reacted with Versamid 125 (a liq. polyamide with terminal amino groups). Other amines used in place of II were ethylenediamine, tetraethylenepentamine, phenylenediamine, aminoethylpiperazine, diaminodiphenylsulfone, and dicyandiamide. Diacetone methacrylamide was similarly reacted with II. To a paint compn. (IV) contg. TiO<sub>2</sub> 500, bisphenol A-epichlorohydrin **resin** 500, iso-BuCOMe 167, xylene 167, and EtOCH<sub>2</sub>CH<sub>2</sub>OH 166 parts, was added 25.7 parts III. A coating 25.4-38.1 .mu. thick was spread on Al panels, the panels were dried, and the brilliance after 500 hrs. was 82-5 in a Fade-O-Meter and the yellowing was 0.0234 compared with 18-23 in a Fade-O-Meter and a yellowing of 0.0458 when 6 parts II was added to IV.

L6 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1969:37271 CAPLUS

DOCUMENT NUMBER: 70:37271

TITLE: Synthesis and study of compounds with the bicyclo[3.3.1]nonane structure

AUTHOR(S): Parrera Casanovas, Carlos

SOURCE: Rev. Real Acad. Cienc. Exactas, Fis. Natur. Madrid (1968), 62(2), 413-83

CODEN: RCFNAT

DOCUMENT TYPE: Journal

LANGUAGE: Spanish

GI For diagram(s), see printed CA Issue.

AB 2,2'-Methylenebis (cyclohexanone) (I) was prepd. by reaction of 35-40% HCHO with cyclohexanone catalyzed by alc. KOH at 100.degree., yield 65-70%. I, m. 58.degree., cyclized intramol. with NaOMe catalyst to furnish 2-hydroxytricyclo[7.3.-1.02,7]tridecan-13-one (II), m. 178.degree., **semicarbazone** m. 197-8.degree.. Reactions of II are of interest because they may be considered models of the reductive dimer of pulegone. II is unaltered by treatment with HCl-pyridine or I in C<sub>6</sub>H<sub>6</sub>. Br in CCl<sub>4</sub> yielded a **resin** so unstable it was not further studied. I<sub>2</sub> in toluene gave a complex mixt. of 6 compds. while redn. with LiAlH<sub>4</sub> gave a diol (III), m. 174-6.degree., probably mainly the diaxial epimer. Dehydration of II with an equal wt. of p-MeC<sub>6</sub>H<sub>4</sub>-SO<sub>3</sub>H in MeOH gave

a yellow liq. (IV), b13 142-5.degree., but catalytic dehydration gave a mixt. of 9 compds. Dehydrogenation with S at 220-30.degree. gave a white solid, m. 101-2.degree., identified as xanthene, and a yellow phenolic oil, probably 9-hydroxyxanthene, confirmed by synthesis from Ph salicylate. Pt-C dehydrogenation gave a white solid, m. 78.degree., which was 1,2,3,-4,4a,9a-hexahydroxyxanthene, a colorless oil contg. dehydration products, and a yellow oil which contd. 2-hydroxydi-phenylmethane. A new route involving enamines to Et 9-oxobicyclo[3.3.1]non-3-en-2-carboxylate (V) was designed. The pyrrolidine enamine of Et 2-oxocyclohexanecarboxylate was condensed with acrolein in the presence of EtONa at -60.degree. to give 50% .beta.-(1-carbethoxy-2-oxocyclohexyl)propionaldehyde (VI), b0.8 125-30.degree., n 1.472. VI was dehydrated by dropwise addn. to conc. H2SO4 yielding 63% V, b1 112.degree., m. 50-51.degree.. Sapon. of V with KOH followed by HCl gave 75% 9-oxobicyclo[3.3.1]non-3-en-1-carboxylic acid (VII), m. 134-5.degree.. Redn. of VII with H over PtO2 gave 96% VIII, m. 122-3.degree.. CrO3 in AcOH oxidized VIII to 37% IX, m. 136-7.degree.. A satd. soln of IX in MeOH was neutralized with alc. KOH, AgNO3 added and the Ag salt recovered and treated with Br in CCl4 to furnish 1-bromobicyclo[3.3.1]nonan-9-one, m. 59-60.degree., but most of the product was unchanged IX. VIII was methylated with CH2N2 to give VIIIA which could be sapon. to regenerate the acid. VIIIA was treated with BzCl to give colorless crystals, m. 70-71.degree.. VIII was acetylated with Ac2O to give the acetate, m. 130-131.degree.. Reaction of BzCl with VIII in pyridine gave X, m. 104-5.degree., and a monobenzoyl deriv. m. 118-19.degree.. Re-fluxing X with MeOH 1 hr. gave the anhydride m. 157-8.degree., of 9-benzoyloxybicyclo[3.3.1]nonane-1-carboxylic acid. Redn. of VII with LiAlH4 in Et2O gave 99% 1-hydroxymethylbicyclo-[3.3.1]non-3-en-9-ol (XI), m. 54-61.degree.. XI was resolved by silica gel chromatog. into 2 epimers, syn-XI, m. 96-7.degree., and anti-XI, m. 74.5-75.5.degree., 3,5-dinitrobenzoate m. 135-6.degree.. Hydrogenation of XI over Pt oxide gave 91% XII, m. 97.degree., 3,5-dinitrobenzoate m. 137.degree.. Tosylation of XI in pyridine gave mainly monotosylated derivs. which could be resolved by thin-layer silica gel chromatog. into the syn-epimer (XIII) and the anti-epimer (XIV). LiAlH4 in Et2O redn. of XIV to an oily yellow liq. which on elution with C6H14 from a silica gel column gave 1,5-dimethylcyclooctane (XV), and anti-1-methylbicyclo[3.3.1]non-3-en-9-ol, 3,5-dinitrobenzoate m. 153-4.degree., p-nitrobenzoate m. 95.degree. (EtOH). Similarly, LiAlH4 redn. of XIII gave syn-1-methylbicyclo[3.3.1]non-3-en-9-ol, m. 23-7.degree., 3,5-dinitrobenzoate m. 186-7.degree.. The ir and N.M.R. spectra of II-IV, VII, VIII, XII-XV are reported.

L6 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1969:35043 CAPLUS

DOCUMENT NUMBER: 70:35043

TITLE: High-boiling neutral compounds from the oleoresin of Pinus silvestris

AUTHOR(S): Shmidt, E. N.; Pentegova, V. A.

CORPORATE SOURCE: Novosibirsk. Inst. Org. Khim., Novosibirsk, USSR

SOURCE: Izv. Sib. Otd. Akad. Nauk SSSR, Ser. Khim. Nauk (1968), (4), 144-6

CODEN: IZSKAB

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The neutral fraction prepd. by sapon. of P. silvestris resin was fractionated in vacuo and the diterpene fraction (200 g.) was chromatographed on basic Al2O3, petroleum ether, and EtOH being used for elution. Thin-layer chromatog. on SiO2 with AgNO3 (5%) was then used to isolate the following compds.: pimaradiene, n20D 1.5270, [.alpha.]20D +92.degree.; dehydroabietinal, m. 50-1.degree., [.alpha.]20D + 50.degree. (CHCl3) (semicarbazone m. 218-21.degree.); abietinal, n20D 1.5304, [.alpha.]20D -53.1.degree. (CHCl3, c 2.0); pimarinal, m. 51-2.degree., [.alpha.]20D + 87.degree. (CHCl3, c 2.0); isopimarinal,

n20D 1.5283, [.alpha.]20D -11.2.degree. (CHCl3 , c 2.0); pimaritol, m. 85-6.degree., [.alpha.]20D +83.degree. (CHCl3); abietinol, m. 83-4.degree., [.alpha.]20D -94.degree.; isopimaritol, m. 81-2.degree., [.alpha.]20D -17.degree. (CHCl3 , c 2.0).

L6 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1968:13197 CAPLUS

DOCUMENT NUMBER: 68:13197

TITLE: Components of Cupressus sempervirens resin.

IV. Total Synthesis of (+-)-sempervirol

AUTHOR(S): Caputo, Romualdo; Mangoni, Lorenzo

CORPORATE SOURCE: Univ. Naples, Naples, Italy

SOURCE: Gazz. Chim. Ital. (1967), 97(6), 920-34

CODEN: GCITA9

DOCUMENT TYPE: Journal

LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

AB (+-)-Sempervirol (I, R = H) (II) was prepd. by a synthesis which involves the prepn. of III, IV, and V. Thus, 100 g. p-iso-PrC6H4COCH2CH2CO2H, treated with 320 ml. fuming HNO3 and 280 ml. concd. H2SO4 gave 90% 4,3-iso-Pr(O2N)C6H3COCH2CH2CO2H (VI), m. 133-4.degree. (C6H6); **semicarbazone** m. 187-8.degree. (decompn.) (EtOH). VI (100 g.) in 400 ml. 5% MeOH hydrogenated over 10 g. Raney Ni and the product treated with 12N H2SO4 gave 74% .gamma.-(4-isopropyl-3-aminophenyl)-.gamma.-butyrolactone (VII), m. 124-5.degree. (EtOH); acetyl deriv. m. 126-7.degree. (C6H6-ligroine). A soln. of 50 g. VII in 450 ml. dil. H2SO4 cooled to 0.degree., treated with 16 g. NaNO2, and treated at 50.degree. with 450 ml. dil. H2SO4 gave 75% .gamma.-(4-isopropyl-3-hydroxyphenyl)-.gamma.-butyrolactone (VIII), m. 114-15.degree. (ligroine-C6H6); acetate m. 78-9.degree. (ligroine). VIII (35 g.) in 200 ml. 95% EtOH hydrogenated 10 hrs. in the presence of 3 g. W7 Raney Ni gave 85% 4,3-iso-Pr(HO)C6H3(CH2)3CO2H (IX); benzoate m. 120-1.degree. (ligroine). IX (32 g.) in 50 ml. 15% NaOH treated with 17 ml. Me2SO4 gave 95% 4,3-iso-Pr(MeO)C6H3(CH2)3CO2H (X), p-phenylphenacyl ester m. 91-2.degree. (ligroine). A soln. of 32 g. X treated with 21 ml. Et3N and the mixt. cooled to <0.degree., slowly treated with 14 ml. ClCO2Et at <0.degree., agitated 15 min., slowly treated at <10.degree. with 47 g. AlCl3, kept overnight, and hydrolyzed gave 66% 6-methoxy-7-isopropyl-1-tetralone (XI), m. 58-60.degree. (ligroine); **semicarbazone** m. 210-13.degree. (decompn.) (EtOH). XI (17 g.) treated with MeMgI (prepd. from 4.3 g. Mg and 12.5 ml. MeI) gave 90% 1-methyl-6-methoxy-7-isopropyl-3,4-dihydronaphthalene (XII), b0.05 121-3.degree., n25D 1.555. A soln. of 15 g. XII in CHCl3 treated with 10 g. BzOOH in 250 ml. CHCl3 and the mixt. kept 48 hrs. at -5.degree. gave 7.3 g. 1-methyl-6-methoxy-7-isopropyl-2-tetralone (XIII), m. 85-6.degree. (ligroine) [**semicarbazone** m. 173-5.degree. (EtOH)], and 8 mg. 7-isopropyl-6-methoxy-1-methylene-2-tetralol, m. 62-3.degree. (ligroine). 1-Hydroxy-1-methyl-7-isopropyl-6-methoxy-2-tetralone (6 g.) treated with excess LiAlH4 gave 3 g. 1-methyl-7-isopropyl-6-methoxy-1,2-tetralin-diol, m. 130-1.degree., which is treated with 50 ml. 1:4 concd. H2SO4-EtOH to give XIII, m. 85-6.degree. (ligroine). A mixt. of 8 g. XIII and 2 g. NaH (50% in paraffin) in 200 ml. ligroine treated under N with 4 ml. EtCOCH2CH2Cl, the mixt. refluxed 15 min. and cooled, 2 g. NaH added, and the mixt. refluxed 1 hr. gave 5.5 g. III, **semicarbazone** m. 60-2.degree.. III (5 g.) slowly added to a soln. of 2.5 g. K in 100 ml. tert-BuOH, 8 ml. MeI added, and the mixt. kept under N 2 hrs. and refluxed 0.5 hr. gave 4 g. IV [2,4-dinitrophenylhydrazone m. 228-9.degree. (EtOAc)], which, treated with 500 ml. Me2CO, 15 ml. concd. HCl, and 20 g. SnCl2 regenerated 85% IV, m. 92-3.degree. (hexane). IV (2 g.) in 30 ml. HOAc hydrogenated over 1 g. 10% Pd-C gave 1.5 g. V, m. 86-8.degree.; **semicarbazone** m. 83-5.degree.. A mixt. of 1 g. V, 18 ml. 15% HCl, and 18 g. Zn amalgam (prepd. from 18 g. Zn and a soln. of 1.8 g. HgCl2 and 1.2 ml. concd. HCl in 18 ml. water) refluxed 45 hrs. and 3 ml. concd. HCl added every 6 hrs. gave 75% I (R = Me), m. 60-1.degree. (ligroine). A mixt. of 500 mg. I (R

= Me), 10 ml. HOAc, and 10 ml. 48% HBr refluxed under N 7 hrs. gave 280 mg. II, b1 180.degree.. A mixt. of 100 mg. II, Ac2O, and NaOAc refluxed 2 hrs. gave (+-)-sempervirol acetate, m. 90-1.5.degree. (MeOH). N.M.R. ir, and uv data are given.

L6 ANSWER 42 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1968:13196 CAPLUS

DOCUMENT NUMBER: 68:13196

TITLE: Components of Cupressus sempervirens **resin**.  
III. Isolation and structure of sempervirol, a new diterpene phenol

AUTHOR(S): Mangoni, Lorenzo; Caputo, Romualdo

CORPORATE SOURCE: Univ. Naples, nPles, Italy

SOURCE: Gazz. Chim. Ital. (1967), 97(6), 908-19

CODEN: GCITA9

DOCUMENT TYPE: Journal

LANGUAGE: Italian

AB Compds. of the general formulas I and II are isolated and used in the prepn. of compds. of the general formulas II and III. The structure, I (R = H, R1 = OH, R2 = iso-Pr), is assigned to sempervirol (IV). The neutral fraction (isolated C. sempervirens **resin**) (7.200 g.) chromatographed on Al2O3, gave mixts. A-H. All mixts. were chromatographed on SiO2. Mixt. B gave 2.6 g. totarol (I, R = iso-Pr, R1 = OH, R2 = H), m. 126-7.degree., [.alpha.]D 41.degree. (c 1) [benzoate m. 145-6.degree., [.alpha.]D 43.5.degree. (c 0.7, CHCl3)]; and 200 mg. manool [II, R = Me, R1 = (CH2)2C(CH:CH2)(OH)Me] [3,5-dinitrobenzoate m. 103-4.5.degree., [.alpha.]D 8.8.degree. (CHCl3). Mixt. C gave 130 mg. oil, ferruginol (I, R = H, R1 = iso-Pr, R2 = OH). The oil (100 mg.) treated with 2 ml. Ac2O and 30 mg. NaOAc gave ferruginyl acetate. Ferruginyl acetate (62 mg.), treated with CrO3 in HOAc, gave a mixt. of 6 mg. 7-oxoacetyl totarol (III, R = iso-Pr, R1 = AcO, R2 = H), m. 167-9.degree., and 50 mg. 7-oxoacetyl ferruginol (III, R = H, R1 = iso-Pr, R2 = AcO), m. 163-5.5.degree., [.alpha.]D 26.8.degree. (c 0.5, CHCl3). Mixt. D (165 mg.) gave 80 mg. IV; a mixt. of 75 mg. IV, 2 ml. Ac2O, and 30 mg. NaOAc refluxed 2 hrs. gave 80 mg. sempervirol acetate (V), m. 92-3.degree., [.alpha.]D 51.degree. (c 0.7 CHCl3). Mixt. E (735 mg.) gave 700 mg. torulosal [II, R = CHO, R1 = (CH2)2C(CH:CH2)(OH)Me], [.alpha.]D 30.degree. (c 0.5, CHCl3), nD 1.55; **semicarbazone** m. 188.5-90.degree., [.alpha.]D -9.degree. (c 1, pyridine). Mixt. F (530 mg.) gave 450 mg. isoagatolal [II, R = CHO, R1 = (CH2)2C(:CHCH2OH)Me] (VI); **semicarbazone** m. 156-8.degree., [.alpha.]D 20.degree. (c 1, CHCl3). A mixt. of 500 mg. VI, 300 mg. LiAlH4, and ether agitated 0.5 hr. and refluxed 4 hrs. gave 400 mg. agatadiol [II, R = CH2OH, R1 = (CH2)2C(:CHCH2OH)Me] (VII), m. 108-10.degree.. Mixt. G gave 330 mg. torulosol [II, R = CH2OH, R1 = (CH2)2C(CH:CH2)(OH)Me], m. 110-11.degree., [.alpha.]D 30.degree. (c 1, CHCl3). Mixt.-gave 180 mg. VII, m. 109-11.degree., [.alpha.]D 31.degree. (c 1, CHCl3). A soln. of 65 mg. V in 5 ml. HOAc treated with a soln. of 50 mg. CrO3 and 0.3 ml. 80% HOAc and the mixt. kept 6 days gave 7-oxosempervirol acetate (III, R = H, R1 = AcO, R2 = iso-Pr) (VIII), m. 162-3.5.degree.. VIII (20 mg.) adsorbed on deactivated Al2O3 (treated with 2% water) and the mixt. kept overnight and eluted with MeOH gave 12 mg. 7-oxosempervirol (III, R = H, R1 = OH, R2 = iso-Pr), m. 180-1.degree.. N.M.R., ir, and uv data are given.

L6 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1967:514337 CAPLUS

DOCUMENT NUMBER: 67:114337

TITLE: Characteristic features of the chemical composition of the Cyperus rotundus rootstock

AUTHOR(S): Akperbekova, B. A.

CORPORATE SOURCE: Detsk. Klin. Bol'nitsa, Baku, USSR

SOURCE: Farmatsiya (Moscow) (1967), 16(3), 36-41

CODEN: FRMTAL

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB From air-dried powd. root of the title plant the following fractions were isolated [yield in % given]: alkaloids, 0.21-0.24; cardiac glycosides, 0.62-0.74; flavonoids, 1.25; essential oils, 1.06; resinous compds., 4.21. One alkaloid, 1 cardiac glycoside, and 2 flavonoids were isolated from their resp. fractions. The essential oils, isolated by chromatog. on alumina, were .beta.-selinene, .alpha.-cyperone [**semicarbazone** m. 213-14.degree. (EtOH)], an unidentified ketone, and cyperol and its esters. The resinous substances were fractionated to give 2.50% acidified H<sub>2</sub>O-extractable compds., 16.10% waxes and paraffins, 46.03% rubberlike substances, 20.30% **resin** acids, and 14.07% **resin** alcs. Bitter substances, tannins (1.66%), carbohydrates (14.41%), starch (9.2%), pectins (8.72%), fats (2.98%), acids (3.25%), and vitamin C (8.8 mg.%) were also present.

L6 ANSWER 44 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1967:432823 CAPLUS

DOCUMENT NUMBER: 67:32823

TITLE: Nature of diterpenic diol from *Larix sibirica*  
**resin**

AUTHOR(S): Shmidt, E. N.; Rezvukhin, A. I.; Pentegova, V. A.

CORPORATE SOURCE: Inst. Org. Khim., Novosibirsk, USSR

SOURCE: Khim. Prir. Soedin. (1967), 3(1), 61-2

CODEN: KPSUAR

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

AB The structure of a previously described diol isolated from the neutral part of *L. sibirica* **resin** and initially identified as larixol was unambiguously detd. to be 13-epitoruzol (I) (from N.M.R. data and by comparison with an original sample). Oxidn. of I with CrO<sub>3</sub> gave an aldehyde, n<sub>20</sub>D 1.5210; **semicarbazone** m. 193-5.degree.. Redn. of I with hydrazine hydrate gave epimanol, m. 38.5-9.5.degree., [.alpha.]<sub>20</sub>D 50.degree. (c 2.65, CHCl<sub>3</sub>). When hydrogenated, I gave tetrahydroepitorulzol m. 77-9.degree., [.alpha.]<sub>20</sub>D 18.8.degree. (c 2.62, CHCl<sub>3</sub>); its oxidn. with CrO<sub>3</sub> in pyridine gave a satd. aldehyde C<sub>20</sub>H<sub>36</sub>O<sub>2</sub>.

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TITLE: Reactivity of p-methoxybenzylidenecyanoacetic acid with cyclohexanone and its 2- and 4-methylated derivatives

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CORPORATE SOURCE: Fac. Pharmacie Strasbourg, Strasbourg, Fr.

SOURCE: Chim. Ther. (1966), (7), 391-6

CODEN: CHTQAC

DOCUMENT TYPE: Journal

LANGUAGE: French

GI For diagram(s), see printed CA Issue.

AB Anisylidenecyanoacetic acid (I) (10.15 g.) and 10 g. cyclohexanone in 250 ml. H<sub>2</sub>O contg. 5 g. NaOH was kept 48 hrs. at 20.degree.. A small amt. of dianisylidenecyclohexanone, m. 160.degree. (EtOH), was filtered off, and the aq. soln. was washed with Et<sub>2</sub>O and poured into excess 3N HCl giving 37.5% 4-(p-methoxyphenyl)-8a-hydroxy-2-oxo-3-carboxydecahydroquinoline (II), m. 140.degree. (decompn.). From the aq. acid soln. 6.6% 4-(p-methoxyphenyl)-2-oxo-3-carboxyoctahydroquinoline (III), m. 142.degree., slowly crystallized. II (500 mg.), added slowly to 3 ml. concd. H<sub>2</sub>SO<sub>4</sub>, kept 15 min., and poured into H<sub>2</sub>O, gave III. II or III was heated 4 hrs. at 130.degree., the residue refluxed 0.5 hr. in 95% EtOH in the presence of active C, and the filtered soln. dild. with H<sub>2</sub>O to incipient turbidity to give 4-(p-methoxyphenyl)-2-oxooctahydroquinoline, m. 146.degree.. II or III (1 g.) was refluxed 4 hrs. in 5 ml. concd. HCl and 10 ml. AcOH giving 3-(p-methoxyphenyl)-3-(2-oxocyclohexyl)-propionic

acid, m. 105.degree.. Similarly, when 10.15 g. I, 11.2 g. 2-methylcyclohexanone, and 7.5 g. NaOH in 75 ml. H<sub>2</sub>O and 50 ml. 95% EtOH was kept 72 hrs. at 20.degree. and the mixt. was washed with Et<sub>2</sub>O and poured into 3N HCl, a resinous ppt. was obtained. It was dissolved in Et<sub>2</sub>O, the washed soln. was evapd., and the residue taken up in C<sub>6</sub>H<sub>6</sub> and kept 3 days, causing the sepn. of some I. The filtrate was evapd., the residue dissolved in Et<sub>2</sub>O, and the washed (KHCO<sub>3</sub>) soln. evapd., leaving 64% of a pale very hygroscopic viscous **resin** which slowly lost CO<sub>2</sub> at room temp. With petroleum ether it became powdery, it strongly decolorized KMnO<sub>4</sub>, gave a red color with FeCl<sub>3</sub>, and did not give any ketone reactions. With CH<sub>2</sub>N<sub>2</sub> it gave a non-crystallizable Me ester, m. .apprx.50.degree.; its analysis agreed with that of a Me 4-(p-methoxyphenyl)-8-methyl-2-oxooctahydroquinoline-3-carboxylate. The free acid (IV) heated 4 hrs. at 90.degree. gave 4-(p-methoxyphenyl)-8-methyl-2-oxooctahydroquinoline, m. 189.degree.. IV (1 g.) refluxed 4 hrs. in a mixt. of 10 ml. AcOH, 5 ml. concd. HCl, and 10 ml. H<sub>2</sub>O gave 3-(p-methoxyphenyl)-3-(2-oxo-3-methylcyclohexyl)propionic acid, m. 145.degree. (C<sub>6</sub>H<sub>6</sub>-petroleum ether). Condensation of 4.06 g. I with 4.4 g. 4-methylcyclohexanone in 40 ml. H<sub>2</sub>O and 10 ml. 95% EtOH contg. 0.5 g. NaOH 40 hrs. at 20.degree. gave 33% 4-(p-methoxyphenyl)-8a-hydroxy-2-oxo-3-carboxy-6-methyldecahydroquinoline (V), m. 135.degree. (decompn.) (Et<sub>2</sub>O), and 7.5% 4-(p-methoxyphenyl)-2-oxo-6-methyloctahydroquinoline (VI), m. 147.degree. [(Me<sub>2</sub>CH)<sub>2</sub>O], which was also obtained on heating V 4 hrs. at 140.degree.. V (0.5 g.), treated 10 min. with 2 ml. of a mixt. of 1 ml. concd. H<sub>2</sub>SO<sub>4</sub> and 3 ml. AcOH, gave 4-(p-methoxyphenyl)-2-oxo-6-methyl-3-carboxyoctahydroquinoline, m. 150.degree.. Refluxing 2 g. V 4 hrs. in a mixt. of 20 ml. AcOH, 10 ml. HCl, and 10 ml. H<sub>2</sub>O gave 3-(p-methoxyphenyl)-3-(2-oxo-5-methylcyclohexyl)propionic acid, m. 142.degree. (**semicarbazone** m. 232.degree.), which is also obtained on like treatment of VI. These condensations take place through nucleophilic addn. of the ketone to the activated double bond of a .delta.-oxonitrile acid which cannot be isolated and which is converted by amide formation and cyclization to a N-contg. hydroxy acid related to decahydroquinoline.